

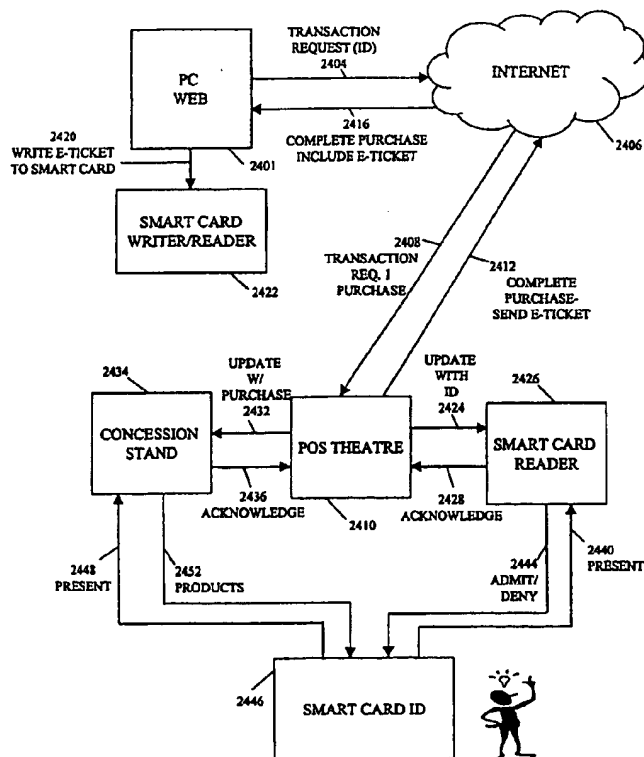
(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
11 January 2001 (11.01.2001)

PCT

(10) International Publication Number  
**WO 01/03040 A1**

- (51) International Patent Classification<sup>7</sup>: **G06F 17/60**
- (21) International Application Number: **PCT/US00/18371**
- (22) International Filing Date: **3 July 2000 (03.07.2000)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:  
60/142,063 2 July 1999 (02.07.1999) US  
60/150,754 26 August 1999 (26.08.1999) US  
60/215,878 30 June 2000 (30.06.2000) US
- (71) Applicant: **ZEBRAPASS, INC.** [US/US]; Suite 232, 4400 East-West Highway, Bethesda, MD 20814 (US).
- (72) Inventors: **KLEAR, Jordan**; Suite 232, 4400 East-West Highway, Bethesda, MD 20814 (US). **STEREN, Marc**; Suite 232, 4400 East-West Highway, Bethesda, MD 20814 (US).
- (74) Agents: **DONNER, Irah et al.**; Hale and Dorr LLP, 1455 Pennsylvania Avenue, N.W., Washington, DC 20004 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— With international search report.  
— With amended claims and statement.

[Continued on next page]

(54) Title: **SYSTEM AND METHOD FOR PROVISIONING TICKET PURCHASES OVER GLOBAL OR LOCAL NETWORKS**

(57) Abstract: A system and method for purchasing and provisioning admittance to entertainment events to a customer utilizes a data communication network. These entertainment events include one or a combination of sporting events, movies, theatre events, open-seating events, or reserved-seating events. The method includes receiving a communication from the event customer which includes an order to obtain admittance to at least one entertainment event (2404). In addition, the communication also includes an identifier associated with an identification device (2446). An account associated with the identifier is then updated to reflect the order (2408). The account is accessed by utilizing the identifier stored in the identification device at the point of sale system upon presentation of the identification device to verify the order (2440). Upon verification of the order at the point of sale system, the event customer is admitted to the entertainment event (2448).

WO 01/03040 A1



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## SYSTEM AND METHOD FOR PROVISIONING TICKET PURCHASES OVER GLOBAL OR LOCAL NETWORKS

**RELATED APPLICATIONS**

This application claims priority from U.S. Provisional Application 60/142,063, filed July 2, 1999, to Klear et al., and U.S. Provisional Applications 60/150,754, filed August 26, 1999, to Klear et al., both of which are incorporated herein by reference.

**TECHNICAL FIELD**

10       The present invention relates generally to purchasing and provisioning items or services online, and more particularly, to a system, method, and computer readable medium storing computer-executable instructions for purchasing items or services including event tickets, concessions, and/or merchandise over a data communication network and provisioning these purchases at a point of sale location. Provisioning, as defined herein, includes in whole or in part, the process of effectuating and/or facilitating the processing of a transaction, including, for example, the sale and/or transfer of tickets for movies, theatre, shows, sporting events, cultural events, and the like.

**BACKGROUND ART**

20       In 1998, online movie ticket purchases accounted for a mere 0.05% of the 1.5 billion movie tickets sold. However, listings of show times for these movies are being accessed over the Internet at astronomical levels. To say, then, that the online movie ticket industry remains largely untapped would be somewhat of an understatement.

To be sure, the number of movie tickets purchased online and other e-commerce transactions are expected to increase at a phenomenal pace in the near future. Movie tickets today are an enormous industry. In 1997, \$6.36 billion dollars were spent on movie admissions. This, coupled with the expected continued increase in the number of e-commerce transactions indicates that the future trend in the sales of movie tickets will be online. According to a recent Wall Street Journal article, the online ticketing industry can best be characterized by the online ticketing powerhouse, Ticketmaster,  
30       which does well over \$10 million a month, ticketing everything from concerts to sporting events. See, FIGS. 1 and 2. International Data Corporation estimated the market at \$2.6 billion in 1996 and expects it to grow almost a hundredfold to \$220 billion in 2001. Forrester Research also expects

Internet-based e-commerce to increase from 12 percent of a typical company's revenue to 42 percent. According to the Internet's largest demographic survey, conducted by the Georgia Institute of Technology in late 1997, of the 10,000 respondents, 47 percent had four-year college degrees or better, and household incomes average more than \$53,000 a year. A joint study from International Data Corp. and Relevant Knowledge Inc. indicates that by 2002, half of the 102 million people in the U.S. who use the Internet at home will be shoppers.

10 The trend in box office revenues over recent years is also encouraging. The number of screens was up 7.1% in 1996, 6.8% in 1997, and an estimated 8% in 1998. Goldman Sachs believes that the industry could have over 40,000 screens by the end of 2002, a 6.5% CAGR increase from the 30,825 screens at year-end 1997 reported by the Motion Picture Association of America. Clearly, then, a vast body of evidence indicates that online ticket sales, not only to movies but also to other events such as sporting events, will only increase in the foreseeable future. Yet with all of this evidence suggesting that the online ticketing industry is more than ready to explode with development, no effective means exist for provisioning items purchased online at a point of sale location particularly designed for entertainment events.

20 Similarly, movie and event advertising via a communications network, like ticket sales, is another area ready for development. In 1997, the average movie advertising costs alone, per feature, was \$19.244 million dollars. The National Association of Theatre Owners, in 1997, conducted an analysis of average movie advertising costs, the results of which are shown in FIG. 3. According to Forrester Research, advertisers have committed less than 3% of their media advertising budgets to the Web. As online advertising dollars rise to over \$8 billion by 2002, movie studios will be spending a greater percentage online to promote their upcoming films. Furthermore, as demonstrated in FIGS. 4a - 4b, the use of e-mail as a vehicle for advertising campaigns looks also to be promising. However, as with the above, no means exist for effectively and efficiently presenting movie and event advertising via a data communications network either during the online purchase of event tickets or via personalized e-mail messages.

30 Movie merchandising and theatre concessions are other key markets ready for development. Current estimates demonstrate that the movie licensing business stands at \$110 billion according to the International Licensing Industry Merchandisers' Association. Theatre concessions, on the other hand, are currently a \$2.6 billion market. Even so, no means exist for users to make any of these

merchandise or concession purchases, remotely, via a data communications network, with the purchase then being redeemable at a point of sale location.

Several prior art techniques have not adequately addressed these needs. For example, U.S. Patent 6,052,629 to Leatherman et al. (Leatherman) is directed to an Internet capable browser dispenser architecture. As shown in prior art FIG. 5 (FIG. 1 of Leatherman), the system of Leatherman includes a plurality of fuel dispensers 12, each having at least two fueling positions and acting as a point of sale (POS) interface. Connected to the fuel dispensers 12 is a main service station store 16, a local server 18, a convenience store 20, a number of restaurants 22, and a car wash 24, as well as other remote servers 26 via the Internet. Basically, the system of Leatherman provides gas station customers with access to a server on a local network and remote sites via the Internet. With this arrangement, the gas station customers may purchase services at the POS dispensers and be subject to advertisements transmitted thereto. However, while Leatherman discusses purchasing items at a gas station, it makes no disclosure of effectively provisioning and/or performing transactions in the entertainment and/or ticketing industry.

U.S. Patent 5,618,045 to Kagan et al. (Kagen) relates to an interactive game system. As depicted in prior art FIG. 6 (FIG. 1 of Kagen), the interactive game system 610 of Kagen includes three playing devices 612, 614, and 616, which communicate via a wireless local area network. Communication is effected utilizing short-range radio, infrared, or ultra-sonic signals. As shown in prior art FIG. 7 (FIG. 2 of Kagen), each playing device includes a processor 718, an interface 720, a transmitter 722, a receiver 724 and a display 726. Using these components, a player's actions are transmitted to and received by another player's playing device.

U.S. Patent 5,636,920 to Shur et al. (Shur) relates to a sports team organizer. In prior art FIG. 8 (FIG. 1 of Shur), a portable computing device for organizing a sports team includes an input device 812, a processor 814, a memory 816, a number of stored programs 818, and an output device 820. With these elements, the organizing system allows a team roster, a starting lineup, and a number of drills to be generated.

U.S. Patent 5,647,795 to Stanton (Stanton) relates to portable computerized pari-mutuel sports entertainment system. In prior art FIG. 9 (FIG. 1 of Stanton), the system includes a computer 911 and

conductor 916, a video cassette recorder 912 with video tape 917, a television set 913, keypads 914, and printers 915. The computer 911 operates as a main computing server, and includes a motherboard 920, a memory card 921, and a number of graphics and other serial cards 922, 923, and 924. With this system, bets are entered from remote locations with keypads 914 and stored in computer 911. After a race, winnings are collected at the cashiers' windows (keypads 914).

The above cited patents are relevant from the perspective that wireless devices are gaining more popularity in today's society.

- 10 U.S. Patent 5,794,207 to Walker et al. (Walker) relates to a method and apparatus for a cryptographically assisted commercial network system designed to facilitate buyer-driven conditional purchase offers. In prior art FIG. 10 (FIG. 1 of Walker), the system includes seller interfaces 300, central controller 200, and buyer node 400. A number of modems 350 and 450 facilitate connection to central controller 200. Using these components, a buyer communicates a binding purchase offer to a number of sellers. In response, the sellers have the option to accept a purchase offer and thus bind the corresponding buyer to a contract. Nevertheless, Walker makes no mention of allowing redemption of the purchases at a point of sale location upon identification or verification of the purchaser or of the purchase.

20

### SUMMARY OF THE INVENTION

In a first embodiment, ZebraPass™ will provide the backend, ticketing technology to existing portal sites such as MovieTickets.com so that the site may provide a better experience for the consumer.

In this example, movie ticket purchases are made online under the following, easy procedure:

1. Moviegoer visits a leading portal such as MovieTickets.com and selects a movie, theatre, and desired time.
2. Moviegoer is linked to ZebraPass.com™ and pays for movie tickets via a credit card in a  
30 secure transaction.
3. Moviegoer's ticket is electronically transferred from ZebraPass™ host server to the theatres' network connector.

4. With the "ZebraPass" smart card, moviegoer avoids box office lines and proceeds directly to the attendant who collects the ticket stubs.
5. An easy-to-use smart card reader is provided to the attendant who, rather than tearing the ticket stub in half, simply flashes the "ZebraPass" onto the smart card reader, identifying the moviegoer as the ticket holder.

10 ZebraPass is a system built for today but scalable enough to comport with plans for tomorrow. ZebraPass electronically transfers the movie ticket to the theatre rather than transferring the ticket directly to the smart card. This alleviates the need for the consumer to have a smart card reader on their home PC. It also makes the system compatible with smart devices. As the smart card merely acts as an identifier, and since all of the ticket information is stored on the ZebraPass server, ZebraPass will duplicate this identification/server model to permit the smart device to act as the identifier while maintaining the ticket information on the server. This enables ZebraPass to use the developed smart card infrastructure for the smart devices.

#### Enabling Technology for Professional Sports Teams Season Tickets Online/Smart Cards

Professional sports ticketing permits the venue to grant a VIP status to its season ticket holders. The ZebraPass can be tied into numerous programs that set them apart from the single game ticket holder.

- 20 > *Season Tickets*
  - > Season ticket holders will have all their season tickets on one smart card or smart device.
- > *Parking*
  - > Ticket holder will have access to VIP parking where he/she can only enter upon flashing the card upon the reader
- > *Debit*
  - > The venues can add a debit feature to the card and collect the float on the interest from the card.
- > *Club Seats*
  - > Provides access to privileged parts of the stadium.
- > *Fewer Employees*
  - 30 > No employee is needed to control the entrance to the VIP section
- > *Loyalty points*
  - > Loyalty can be tied directly into the card and will work with the venue's participating merchants.

### Demographic Information

By having each prospective user register demographic information on the site such as age, zip code, and entertainment interests, ZebraPass™ will be able to generate key demographic information that was previously unknown. This is known as “ZebraPass Knowledge Management.”

ZebraPass Knowledge Management is the process of acquiring information about moviegoers, turning the information into specific knowledge, then deploying that knowledge throughout the business to enable:

- Consumer focused planning and decision making,
- 10 ➤ Consumer knowledge based marketing, and
- Intelligent, real time interaction with consumers at every contact point.

ZebraPass Knowledge Management is a component of a well-rounded ZebraPass Relationship Management strategy. Benefits include:

- Increased sales revenue and profit
- More precise demand forecasts
- Improved customer retention, satisfaction and loyalty
- New market/opportunity identification for business growth
- 20 ➤ Rapid, centralized tracking and measurement of marketing ROI
- Enables a capital budget approach to marketing investments
- Flexibility to respond to rapidly changing marketing conditions
- Improved customer service

ZebraPass™ will provide value to many different groups including ticket portals, movie theatres, consumers, and sports teams.

Value Proposition to *ticket portals*:

- 30 ➤ Increase Revenues
  - Increase advertising space
- Increase Exposure
  - Increase stickiness
  - Create advantage over competition



- Branding opportunities on the "ZebraPass"

Value Proposition to *movie theatres*:

- Lower Costs
    - Decrease costs incurred via printing fewer movie tickets at the box office
    - Decrease number of employees at the box office as a result of increased smart card usage
    - Eliminate need for kiosk machines
  - Increase Revenues
- 10
- Increase efficiency at concession stand
  - Improve sales of tickets and concessions from key demographic information
- Exposure
    - Improve safety due to the decrease in the amount of cash handled at the theatres
    - Ensure that parent's money given to their children is actually spent on the concessions
    - Eliminates fraudulent activity

Value Proposition to *sports teams/ stadiums*:

- Improve demographic information to improve box office gross
- 20
- Direct marketing
  - More focused advertising on the website
  - Loyalty points and gift certificates
  - Parking
  - Debit
  - VIP status

Value Proposition to *theme parks*:

- VIP status
  - Increased Efficiency
- 30
- Parking
  - Loyalty points
  - More targeted advertising to consumers

Value Proposition to *consumers*:

- Shorter lines at the box office
- Greater convenience at the concession stand and box office
- Easy way to control your family budget
- College students can charge their tickets and concessions on their credit cards
- On line student and senior citizen registration to ensure discounts
- No need to use their credit card to redeem their ticket

As the concepts of the present invention work seamlessly with non-assignable and assignable seat venues, ZebraPass™ will rapidly evolve the ticketless concept to the next realm:

10

With the introduction of the standard Bluetooth technology, ZebraPass will utilize smart devices such as cell phones, PDAs, and pagers and other devices enabled with wireless application protocol (WAP). The ticket will be purchased via a smart device and redeemed using that same smart device.

For example:

20 A Miami Heat fan steps out of his/her home on the way to the stadium. Using a WAP enabled wireless device, he is able to check the schedule for the game and then purchase a ticket on the way to the arena. The ticket is transferred electronically to the venue and will be matched accordingly with his/her identification which can be found in the phone. On the way to the arena, he/she is able to check weather reports to determine whether or not he/she needs his/her umbrella while he walks to the game. He/she arrives at the arena and walks past the Bluetooth enabled reader with the cell phone still in his/her pocket. The reader matches the code of the phone to that of the electronic ticket and permits our Miami Heat fan to enter, all in 1/10 of a second.

#### Products/Services

ZebraPass serves, for example, two ticket market niches, the individual ticket market and the season ticket professional sports team market.

30 In one example, individual ticket purchases are made online under the following procedure:

1. Ticketholder visits a leading site such as MovieTickets.com and selects an event, venue, and desired time.

2. Ticketholder is linked to ZebraPass.com and pays for the ticket with a credit card in a secure transaction.
3. Ticketholder's ticket is electronically transferred from ZebraPass™ host server to the venue's network connector.
4. With the "ZebraPass" contactless card, ticket holder avoids lines and proceeds directly to the attendant who normally collects the ticket stubs.
5. An easy-to-use smart card reader is provided to the attendant who, rather than tearing the ticket stub in half, simply flashes the "ZebraPass" onto the smart card reader, identifying the individual as the ticket holder.

10           In another embodiment, Zebropass allows online users to purchase concessions in advance and with a credit card.

To eliminate fraud, once a smart card has been flashed onto the real-time point-of-sale system, it becomes invalid.

As another example, season ticket purchases are made under the following procedure:

1. Ticketholder visits a leading professional sports team web site to purchase season tickets.
2. Ticketholder is linked to ZebraPass.com and pays for the tickets with a credit card in a  
20           secure transaction.
3. Season ticket holder's ticket is electronically transferred from ZebraPass™ host server to the venue's network connector.
4. With the "ZebraPass" contactless card, ticket holder avoids lines and proceeds directly to the attendant who normally collects the ticket stubs.
5. An easy-to-use smart card reader is provided to the attendant who, rather than tearing the ticket stub in half, simply flashes the "ZebraPass" onto the smart card reader, identifying the individual as the ticket holder.

30           Thus, to address the above and other needs of the prior art, it is an object of the present invention to provide users with the ability to purchase items including tickets and concessions and/or other merchandise online. By doing so, the present invention allows these users to proceed directly to an attendant, thereby bypassing any box offices. In addition, the present invention allows purchases

of a variety of items such as movie tickets, concessions, movie merchandise, and/or other similar goods or services from a single site. The present invention facilitates these purchases and the subsequent provisioning thereof by utilizing an identification device associated with a user's account which, in turn, is readable by a reader at a point of sale location for verifying the purchases made by the user.

It is also an object of the present invention to facilitate the provisioning of demographic information to program sponsors. By having each user register demographic information such as age and interests during, for example an initialization process, the present invention compiles information for advertising and marketing use. Using this information, the present invention allows event  
10 sponsors to create custom offerings to users. Similarly, the invention allows a sponsor to leverage user and market information to create programs that address evolving user needs for targeting and acquiring new customers.

It is another object of the present invention to provide marketing opportunities for the events themselves and/or event related merchandise at an entertainment site. This allows users to shop for tickets, concessions, and event-related merchandise at a single time and location.

It is yet another object of the present invention to apply these concepts to a wide variety of venues such as movies, concerts, sporting events, cultural activities, reserved seating events, events requiring advanced ticket purchase, and/or other similar and analogous events.

To accomplish the above and other objects, a user first visits a leading portal, for example,  
20 Yahoo! or CitySearch, and selects an event and a desired time. Next, the user is linked to a server, where he or she purchases a ticket and/or concessions and other merchandise with, for example, a credit card, in a secure transaction. The event ticket is then transferred to the user's account, which in turn is associated with a smart card in the possession of the user. With the smart card in hand, the user avoids any box office lines and proceeds directly to an attendant or a point of sale (POS) server or system. The user then presents the smart card to the attendant or POS who reads the smart card using a reading device. After reading the smart card, the attendant or POS accesses the user's account and verifies that a ticket has indeed been purchased before admitting the user.

In another embodiment, a registration form is first completed by the user in an initialization process. Subsequently, the user selects an event and pays for the ticket with, for example, a credit  
30 card in a secure e-commerce transaction. Then, in this embodiment, a bar coded ticket or receipt is generated and printed by the user. With the bar coded ticket or receipt in hand, the user avoids the box office lines and proceeds directly to an attendant or POS who collects the ticket, verifies the purchase optionally automatically via a bar code reader, and admits the user to the movie screen.

In these embodiments, a scanner is utilized by the movie theatre attendant who, rather than tearing the ticket stub in half, simply scans the bar code with the scanner to verify that a ticket purchase has indeed been made by the user. Similar processes may be used for the purchase of merchandise and concessions. Furthermore, to eliminate fraud, once a ticket has been scanned into the real time point of sale system, it cannot be used again. Alternatively, the present invention is implemented in a fully automated setting without human intervention, except in the event of a failure or when assistance is needed.

10 In other embodiments, the present invention utilizes credit cards, smart cards, or cards with memory media embedded therein, or other portable devices, such as wireless phones, wireless pagers, personal digital assistants, or Internet-ready watches as an alternative or in addition to the printed tickets.

In one embodiment, the present invention relates to purchasing and provisioning an item utilizing a server linked to a client via a data communication network. This embodiment includes receiving a communication at the server from the client. The communication includes an order for a purchase of the item and an identifier associated with an identification device. This embodiment also includes updating an account associated with the identifier to reflect the purchase, accessing the account by utilizing the identifier at a point of sale server upon presentation of the identification device to verify the purchase, and provisioning the item at the point of sale server after verification of the purchase.

20 In another embodiment, the present invention also relates to purchasing and provisioning an item utilizing a server linked to a client via a data communication network. This embodiment includes receiving a communication at the server from the client. The communication includes an order for a purchase of the item. This embodiment also includes transmitting an identifier associated with an account from the server to the client for storage on an identification device, updating the account to reflect the purchase, accessing the account at a point of sale server upon presentation of the identification device by utilizing the identifier to verify the purchase; and provisioning the item at the point of sale server after verification of the purchase.

30 In yet another embodiment, the present invention relates to purchasing and provisioning an item utilizing a server linked to a client via a data communication network. This embodiment includes transmitting a communication from the client to the server. The communication includes an order for a purchase of the item and causes an account to be updated thereby reflecting the purchase. The purchase and the account are associated with an identifier stored on an identification device. The account is accessible upon presentation of the identification device for verifying and provisioning the item.

In still yet another embodiment, the present invention relates to purchasing and provisioning an item utilizing a server linked to a client via a data communication network. This embodiment includes transmitting an order for a purchase of the item from the client to the server, associating an identifier with the purchase order and with an identification device in the possession of or to be transferred to a user, updating an account associated with the identifier to include the purchase, accessing the account at a point of sale server upon presentation of the identification device by utilizing the identifier to verify the purchase; and provisioning the item at the point of sale server after verification of the purchase order.

10 In yet another embodiment, the present invention relates to purchasing and provisioning an item utilizing a server linked to a client via a data communication network. This embodiment includes receiving a communication from a user including a purchase order request. In this embodiment, the user is associated with an identifier. This embodiment also includes updating an account associated with the identifier to reflect the purchase order; and provisioning the purchase upon presentation of the identifier.

20 Thus, any or all of the following advantages may be provided by the present invention: decrease costs incurred via printing fewer movie tickets at the box office; decrease the number of employees at the box office as a result of increased home based printing and smart card usage; increase efficiency at concession stands; provide another method and outlet to sell tickets and concessions; sell more tickets using e-mail messages; improve sales of tickets and concessions from key demographic information; receive a portion of advertisement sales; improve safety due to the decrease in the amount of cash handled at the theatres; ensure that parents' money given to children is actually spent on the concessions; shorter lines at the box office; greater convenience at the concession stand and box office; advance sales; more information about movies before purchase of ticket; easy way to control a family budget; greater access to merchandise; improve demographic information to improve sales; direct marketing; higher impact for advertising via e mail messages; and/or more focused advertising.

30 There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings.

The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark  
10 Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter in which there is illustrated preferred embodiments of the invention.

20 Other objects of the present invention will be evident to those of ordinary skill, particularly upon consideration of the following detailed description of the preferred embodiments.

### NOTATIONS AND NOMENCLATURE

The detailed descriptions which follow may be presented in terms of program procedures executed on computing or processing systems such as, for example, a stand-alone gaming machine, a computer or network of computers. These procedural descriptions and representations are the means used by those skilled in the art to most effectively convey the substance of their work to others skilled in the art.

10        A procedure is here, and generally, conceived to be a self-consistent sequence of steps leading to a desired result. These steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared and otherwise manipulated. It proves convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like. It should be noted, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities.

20        Further, the manipulations performed are often referred to in terms, such as adding or comparing, which are commonly associated with mental operations performed by a human operator. No such capability of a human operator is necessary, or desirable in most cases, in any of the operations described herein which form part of the present invention; the operations are machine operations. Useful machines for performing the operation of the present invention include general purpose digital computers or similar devices.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a graph illustrating the amount of money spent on movie admissions in recent years in the United States;

30        FIG. 2 is a table illustrating the number of movies attended by U.S. residents in recent years;

FIG. 3 is a chart illustrating an analysis of movie advertising costs;

FIGS. 4a - 4d illustrate an analysis of e-mail as a vehicle for advertising campaigns;

FIG. 5 illustrates a prior art Internet capable browser dispenser architecture;

FIGS. 6 - 7 illustrate a prior art interactive game system;

FIG. 8 illustrates a prior art sports team organizer;



FIG. 9 illustrates a prior art portable computerized pari-mutuel sports entertainment system;

FIG. 10 illustrates a prior art cryptographically assisted commercial network system;

FIG. 11 depicts one example of an architecture capable of implementing the present invention;

FIG. 12 illustrates some of the interactions occurring between a proxy and a POS system;

FIG. 13 illustrates some of the interactions occurring between identification devices and a theatre/venue system;

FIG. 14 illustrates some of the interactions occurring between identification devices and a theatre/venue system in a Bluetooth enabled embodiment of the present invention;

10 FIG. 15 depicts another example of an architecture capable of implementing the present invention;

FIG. 16 is a flow diagram illustrating one example of a process used for purchasing items in accordance with the principles of the present invention;

FIG. 17 depicts another example of an architecture capable of implementing the present invention;

FIG. 18 is a flow diagram illustrating one example of another process used for purchasing items in accordance with the principles of the present invention;

FIG. 19 is a flow diagram illustrating one example of a process used for redeeming items purchased in accordance with the principles of the present invention;

20 FIG. 20 depicts a combined architecture and process diagram illustrating a purchase and redemption process in accordance with the principles of the present invention;

FIG. 21 is a flow diagram illustrating one example of yet another process used for purchasing items in accordance with the principles of the present invention;

FIG. 22 is a flow diagram illustrating one example of yet another process used for redeeming items purchased in accordance with the principles of the present invention;

FIG. 23 depicts a combined architecture and process diagram illustrating yet another purchase and redemption process in accordance with the principles of the present invention;

FIG. 24 is a flow diagram illustrating one example of still yet another process used for purchasing items in accordance with the principles of the present invention;

30 FIG. 25 is a flow diagram illustrating one example of still yet another process used for redeeming items purchased in accordance with the principles of the present invention;

FIG. 26 depicts a combined architecture and process diagram illustrating still yet another purchase and redemption process in accordance with the principles of the present invention;

FIG. 27 is a flow diagram illustrating one example of a process used for purchasing and redeeming items in accordance with the principles of the present invention;

FIG. 28 is a flow diagram illustrating another example of still yet another process used for purchasing items in accordance with the principles of the present invention;

FIG. 29 is a flow diagram illustrating another example of still yet another process used for redeeming items purchased in accordance with the principles of the present invention;

FIG. 30 depicts a combined architecture and process diagram illustrating still yet another purchase and redemption process in accordance with the principles of the present invention;

FIG. 31 illustrates one example of a central processing unit for implementing a computer process in accordance with a computer implemented embodiment of the present invention;

FIG. 32 illustrates one example of a block diagram of internal hardware of the central  
10 processing unit of FIG. 31;

FIG. 33 illustrates another example of a block diagram of internal hardware of the central processing unit of FIG. 31;

FIG. 34 illustrates one example of a memory medium which may be used for storing a computer implemented process of the present invention; and

FIG. 35 illustrates an example of a combined Internet, POTS, and ADSL architecture which may be used to implement the present invention.

#### BEST MODE FOR CARRYING OUT THE INVENTION

20 Reference now will be made in detail to the presently preferred embodiments of the invention. Such embodiments are provided by way of explanation of the invention, which is not intended to be limited thereto. In fact, those of ordinary skill in the art may appreciate upon reading the present specification and viewing the present drawings that various modifications and variations can be made.

For example, features illustrated or described as part of one embodiment can be used on other embodiments to yield a still further embodiment. Additionally, certain features may be interchanged with similar devices or features not mentioned yet which perform the same or similar functions. It is therefore intended that such modifications and variations are included within the totality of the present invention.

30 In accordance with the principles of the present invention, items including event and movie tickets, concessions, and/or other merchandise are purchased online over a data communication network and provisioned at a point of sale location after confirmation or verification of the purchase, purchase related information, the identity of the purchaser and/or purchaser related information. In the context of movies or sporting events, this advantageously allows the purchaser or user to bypass lines and proceed directly to his or her seat and/or concessions and merchandise stands. In addition,

the present invention also categorizes events and movie listings in a multi-faceted manner. In particular, based on a user's prior purchases, and/or the user's responses to a questionnaire completed during an optional initialization process, the user may be presented with specially tailored event or merchandise listings, via, for example, electronic mail messages. Similarly, the users may be presented with the option of accessing information concerning the event including reviews, locations, directions, costs, descriptions and/or other similar information. Additionally, advertisements may be presented at any time during the purchasing process and/or on the surface of any identification devices provided by the sponsor, and such advertisements can optionally be related to the events administered or utilized by such identification devices. Smart cards are provided as one example of such an

10 identification device.

Smart cards are standard credit or debit sized cards that contain an embedded integrated circuit. The integrated circuit in a smart card has processing capability and extensive storage. Smart cards have many advantages over conventional magnetic stripe cards due to their processing capability, greater storage capacity and resistance to counterfeiting.

Smart cards can either be contact or contactless. Contact smart cards typically are inserted into a reader, while contactless smart cards need only to be passed within a close proximity of a reader. By using Radio Frequency (RF) technology, contactless cards can complete a transaction in

20 1/10 of a second, thereby allowing rapid consumer through put through a transaction point.

The speed, security and flexibility of contactless smart cards has lead to their rapid adoption by mass transit authorities around the world, including the Washington DC area Washington Metropolitan Area Transit Authority (WMATA).

#### Usage Scenarios

The ZebraPass system in this embodiment can be described in four use scenarios.

- 1) Consumer
- 30 2) Theater/ Stadium
- 3) ZebraPass
- 4) Web portal using the ZebraPass system

Consumer Use- Theaters/ Professional Sports Teams

The consumer using the system has four use scenarios:

- 1) Web enrollment
- 2) Web usage of ZebraPass consumer services
- 3) Claim smart card at the theater
- 4) Redeem ticket (with smart card) at theater

Web enrollment

10 Web enrollment is a user's entry to the system. The user goes to a web portal, and makes a request to purchase tickets online. The portal employs the ZebraPass system to perform a user registration process, which results in assigning a user ID and password. The registration information, including the user's credit card information, is then stored in the ZebraPass system. Cardholder verification is then performed. At the end of the process, the user has a means of securely logging onto the system, and the ZebraPass system has stored all of the information, necessary to complete purchases.

20 In the case of a consumer purchasing their season tickets online, the season ticket holder will receive their ZebraPass card directly from the ticket office. The purchase of the season ticket package can be made either directly on the team's website or offline. After the purchase of the season ticket package, the season tickets are stored directly on the ZebraPass system.

Web usage of ZebraPass consumer services

Once a user is registered to the ZebraPass system, the user can access its services through the portal/ team's website.

Services include:

*Theaters*

- Obtaining show time information for a particular theater.
- Buying tickets for theater seats.
- 30 • Buying concessions.
- Viewing and canceling purchases.

*Sports Teams*

- Obtaining season ticket information for a particular team.
- Buying tickets for a season.
- Adding a debit amount of concessions for the season.
- Transferring tickets to another user on the system.
- Purchasing preferred parking for the stadium.
- Accessing loyalty points on the ZebraPass system.

10 The user interacts with the Web portal, which in turn accesses the ZebraPass system to maintain the user's session state, and to access ZebraPass services.

When the user makes or changes purchases through ZebraPass, the record of the transaction is not stored on the ZebraPass smart card. Instead, it is stored in the venue's point of sale (POS) system. Thus, "inventory" resides at the venue. The ZebraPass smart card is used for identification of the user. The user therefore does not need to have a smart card reader on his or her own computer. A smart card reader is only required at the theater/stadium POS system.

20 In addition to using a ZebraPass smart card, the ZebraPass system may eventually support the use of other contact or contactless smart cards.

Claim smart card

If the user does not have a supported smart card, they can obtain a ZebraPass smart card at a participating theater or stadium.

30 The consumer needs a smart card only for the purpose of authentication at the theater/stadium. The first time the user uses the ZebraPass system online, a record of the transaction is created in the ZebraPass system. Once a record is created, the consumer can go to any participating theater/stadium and obtain their smart card. Theater/Stadium personnel issue the smart card, and the user's identity is stored in the consumer's ZebraPass file. The card issuing transaction is performed by the ZebraPass System.

Redeem ticket (with smart card) at theater/stadium

Once the user has either a ZebraPass smart card or any smart card that is supported by the

ZebraPass system, they can use it to enter shows/games at that or any participating theater/stadium. The user redeems a ticket purchase by proceeding directly to the desired show/game for which a ticket was purchased, and flashing the ZebraPass smart card past a ZebraPass proximity (contactless) smart card reader. (If a non-ZebraPass card is used, and the card used is a contact smart card, the card will instead have to be inserted into a smart card reader. The ticket redemption procedure is the same, however.)

The smart card reader at the theater/stadium communicates with the theater's POS system. ZebraPass software in the system interacts with the user's smart card and attempts to authenticate the user. If authentication is unsuccessful, a message indicating failure is displayed on a panel in the smart card reader. In this case, the user is not admitted to the show/game.

If authentication is successful, the ZebraPass system looks in its database stored in the theater or stadium's POS system, and verifies that this user has purchased a ticket for show/game that is currently being admitted. Again, if this test fails, the user is rejected. If, however, this test succeeds, the user's ticket is redeemed, marked as a "stub", and the user is admitted.

Using a smart card reader attached to the ZebraPass system, a similar procedure is used to claim packaged concessions purchased online through the ZebraPass system. The user's smart card is used to authenticate the user, and ZebraPass software in the theater POS system verifies a prior online purchase of concessions and displays what the concessions have been purchased enabling the concession staff to transfer the concessions. The sale of "packaged" concessions should result in a shorter waiting line at the concessions stand. In the case of sporting events, concession purchases simply go against the existing value currently residing on the card itself.

#### Theater Use

A participating theater will typically implement software support in at least these areas of functionality:

- 1) Viewing current ZebraPass purchases, as well as other management data.
- 2) The ability to interact directly with and override the ZebraPass system in order to expedite customer service requests.
- 3) The ability to obtain marketing or demographic information related to ZebraPass purchases for their theater.
- 4) The ability to monitor the status of the theater's ZebraPass connection, and the ZebraPass server,

as well as to view and verify the information that is being presented to users for their theater.

Note that when a consumer makes a ticket purchase through the ZebraPass system, two transactions typically occur:

- 1) The ticket purchase is charged to the consumer's credit card.
- 2) The ZebraPass system makes a payment to the theater.

#### Stadium Use

A participating stadium will need software support in at least these areas of functionality:

- 1) Viewing current ZebraPass purchases, as well as other management data.
- 10 2) The ability to interact directly with and override the ZebraPass system in order to expedite customer service requests.
- 3) The ability to obtain marketing or demographic information related to ZebraPass purchases for their stadium.
- 4) The ability to monitor the status of the stadium's ZebraPass connection, and the ZebraPass server, as well as to view and verify the information that is being presented to users for their event.

Note that when a consumer makes a ticket purchase through the ZebraPass system, two transactions actually occur:

- 1) The ticket purchase is charged to the consumer's credit card.
- 2) The ZebraPass system makes a payment to the sports team.

20

#### ZebraPass Use

The ZebraPass system operates as a service on a 24X7 basis to provide customer support. This will require administrative functions to monitor the status of the system, its usage, and the status of sessions and transactions in progress. Accounting services will also be provided to manage ZebraPass financial accounts and payments made to theaters and sports teams. The ZebraPass system will also provide administrative services.

#### Web Portal Use

- 30 Web portals, which employ the ZebraPass system in order to provide online ticket purchasing to end-users, must interface to the ZebraPass system. The ZebraPass system is designed to make this integration as simple as possible.

Once integrated with the ZebraPass system, a portal/team web site needs to monitor its usage

of the ZebraPass.

### System Architecture

The overall architecture of the ZebraPass System is illustrated in FIG. 11 and is divided into three major components: web portals 501, a ZebraPass server 505, and theaters 509. ZebraPass customers 511 purchase tickets by using a set of dynamically generated web pages that are provided through a web portal 501 such as MovieTickets.com or PhoenixCoyotes.com. Through these web pages, a customer 511 can send requests to purchase tickets to a ZebraPass server 505 which also resides on the Internet 512. The ZebraPass server 505 accepts customer requests from the participating web portals 501 and forwards them to the appropriate theaters/sports teams 509.

A ZebraPass System 513, which may include the ZebraPass Internet proxy software and hardware, resides at the theater/stadium site to accept requests from the ZebraPass server 505. The ZebraPass system 513 interacts with the theater or stadium's POS system 521 to request ticket purchases and report results back to the ZebraPass server 505, which in turn forwards that information to the customer 511 via the web portal 501. The ZebraPass System 513 is designed to integrate with any of the top POS systems, which include Pacer/CATS and Radiant Systems. In addition, the ZebraPass System 513 manages the smart card readers 525.

20

### ZebraPass Server

The ZebraPass server 505 consists of a scalable application server cluster and a database system 529. The application server stores all transactions in the database 529, as well as customer demographic information and cached show time/game information. It completes transactions with theater/stadium systems and credit card processors in real time. ZebraPass software on the application server implements the ZebraPass system's services, including ticket purchasing, show time requests, game times, etc.

### ZebraPass Internet Proxy

30 The ZebraPass Internet proxy 517 serves as a front end to the ZebraPass System 513. It brokers the ZebraPass customer's ticket requests to a theater/stadium's POS 521 and issues requests for tickets and show times/games. The Internet proxy 517 displays to the end user all output from the ZebraPass system 513 that the user needs to see. To accomplish this, a software component is installed on the portal system to communicate with the ZebraPass server 505.



### Stadium/Theater System

The stadium/ theater system tier consists of the internet proxy 517 described above, ZebraPass software, and the stadium/ theater POS system 521. It also includes smart card readers 525 which serve the purpose of validating ZebraPass ticket holders as well as activating new customer cards. The system to which the smart card reader is attached also displays information about purchases, such as which concessions were purchased, and for which shows/game a user has purchased tickets.

10 The ZebraPass system 513 communicates with the theater/stadium POS system 521 in order to obtain information on the number of available seats for a given show/game, to obtain a list of available shows/games, and to initiate and complete purchases which are paid for by the ZebraPass system.

### ZebraPass Integration with POS System

#### ZebraPass Internet Proxy to POS Interface

20 The point of integration between ZebraPass 505 and the POS system 521 is the ZebraPass internet proxy 517. All of these subsystems reside either in the theater/stadium itself or somewhere on the theater or stadium's wide area network (WAN). FIG. 12 provides an overview of the interactions between the proxy 517 and a theater supported POS system 521.

The two types of customer requests which involve communication with the theater's POS system 521 are ticket purchases 604 and movie show times 608. The POS system 521 uses the same interface to respond with purchase confirmation/failure information 612 as well as movie listings 616. A customer's request for movie show times 616 does not automatically result in a query of the theater's POS system. Since movie show times do not change that often, the system can be configured to issue updates 620 to the ZebraPass server 505 whenever movie listings or show times change.

30 In the use of a stadium system, the POS system and the ZebraPass system must communicate and interface in order to transfer tickets via a secure authentication. This process must be done to ensure that the correct recipient receives the ticket, that the ticket can only be used once, and ensure that the ticket cannot be duplicated.

### ZebraPass Internet Proxy to Smart Card Hardware Interface

Although the ZebraPass smart card hardware and software are installed at the theater/stadium site, they operate independently of the theater/stadium POS system 521. POS systems 521 do not need to be modified to communicate with smart cards because this function is managed by the ZebraPass software. FIG. 13 illustrates the interactions between smart cards 701 and the ZebraPass system 513.

10 The ZebraPass to smart card interface consists of two primary interactions. The first scenario involves new user registration. When a new customer has purchased tickets with ZebraPass for the first time, he/she must claim a ZebraPass smart card 701 at the theater or stadium. The customer presents a major form of identification such as a driver's license or credit card. A stadium/theater employee performs a lookup of the customer in the ZebraPass database 529. If a match is made, the ZebraPass system will issue a command to the smart card reader 525 to activate the new customer's identification number on a ZebraPass smart card (step 704), which is subsequently given to the customer (step 708). ZebraPass customers only need to do this the first time they purchase tickets.

20 The second scenario occurs when a card-holding customer redeems a ticket. After purchasing tickets through a participating ZebraPass web portal, the customer redeems his or her ticket simply by walking through a smart card reader 525 located at the theater/stadium. When the customer presents the ZebraPass card (step 712), the smart card reader 525 will detect the ZebraPass identification number on the card and send it to the ZebraPass system software (step 716). The software will perform a lookup of this number in its local database 529. Note that the ZebraPass database 529 is located on-site with the ZebraPass system 513, making the validation process almost instantaneous. The ZebraPass database contains a copy of the master inventory contained in the POS database 529. Once the system has found a match between the ZebraPass ID and an existing seat reservation, a confirmation is sent back to the smart card reader display, indicating that the customer is allowed to enter the theater/stadium.

### Bluetooth Smart Devices

30

In another implementation of its ticketing purchasing system, ZebraPass adds ticketing by wireless devices. As depicted in FIG. 14, instead of using a contactless smart card, wireless devices such as cell phones and PDAs 801, utilizing Bluetooth, will be used to identify the ticket holder and vend (electronically) a ticket.

Bluetooth is a low-power radio that fits into a small chip set that will be embedded into devices like cell phones and PDAs which could then communicate with other Bluetooth devices in unlicensed spectrum. The Bluetooth Special Interest Group includes Intel, Nokia, Toshiba, IBM, 3Com, Lucent Technologies, Microsoft, and Motorola.

Through the use of smart handheld devices such as cellular phone, personal digital assistants, pagers and communicators 801, goods and services can now be purchased from the Internet by use of the wireless application protocol which extends the functionality of the web and its services onto  
10 wireless devices.

The ZebraPass server electronically transfers the ticket from the host server to the theatre's point of sale which then integrates, through the ZebraPass software, with the Bluetooth enabled reader. As the person walks past the reader, the reader identifies the smart device (step 809), through Bluetooth, as identity of the ticket holder thereby permitting the person to enter the venue (step 813).

Another example of an architecture utilizable for implementing the features of the present invention is depicted in FIG. 15. In this embodiment, one or more of a plurality of individual computers or communications systems (clients) 1210, 1212, 1214, and 1216 are linked to one other  
20 and to main computing server 1220 via communication network 1230. Communication network 1230 may include one or more shared data buses or links, point-to-point dedicated dial-up connections, private networks, the Internet or Internet 2, and any other analogous or similar connections or network(s). Clients 1210, 1212, 1214 and 1216, on the other hand, include any number of devices useable by a user to interface and communicate with main computing server 1220.

In a first example, computing systems or clients 1212 may include personal computers operating, for example, an Internet browser, connected to network 1230 by conventional telephone service (POTS) via, for example, standard telephone modems. In another example, computing  
30 systems or clients 1214 may include other similar computing devices connected to network 1230 via a private local or wide area network 1234. Likewise, the computing systems may be connected via ISDN lines, T1 connections, or the like, using any suitable or analogous technologies and protocols including Multipoint Multichannel Distribution Service (MMDS), Digital Subscriber Line (DSL), Asynchronous Subscriber Line (ADSL), satellite service, and/or the like. For instance, computing systems or clients 1210 may be connected to network 1230 through cable television systems utilizing cable modems 1211.

The particularities of the computing and communications systems used to access main computing server 1220 are irrelevant. What is important however is that the client systems allow a user to access main computing server 1220. To illustrate this point, the client systems are not limited to being conventional computers. For instance, clients 1216 may include Internet-ready television units, or portable devices including digital or other wireless telephones, personal digital assistants (PDA), wireless two-way pagers, Internet-ready watches, and other similar devices including standard Bluetooth enabled devices or devices implementing, for example, Wireless Application Protocol (WAP) and accessing the Internet through a Windows CE or Palm OS device. Hence, as an example, a menu-driven WAP phone may incorporate a mouse, instead of or in addition to a small keypad to access main computing server 1220. Similarly, main computing server 1220 may be viewed on a cell-phone or Internet ready watch display.

With embodiments utilizing standard Bluetooth technology, a tiny Bluetooth microchip, incorporating a radio transceiver, is built into the digital devices. The Bluetooth technology makes all connections instantly and without usage of cable or wires. It facilitates fast and secure transmissions of both voice and data, even when the devices are not within line-of-sight. The radio operates in a globally available frequency band, ensuring compatibility worldwide.

In these embodiments, the Bluetooth enabled devices communicate spontaneously to offer, for example, voice/data point access; cable replacement; and personal ad-hoc networks. Voice/data access points are enabled by recognizing and connecting to different types of networks through a Bluetooth connection. For instance, a Bluetooth enabled mobile phone can connect to the Internet as simply as any wire-bound connections. Cables can also be eliminated with Bluetooth technology even when the devices are not within line-of-sight. Furthermore, all Bluetooth-enabled devices can be set up to automatically exchange information and synchronize with one another. For instance, appointments scheduled on a handheld device can automatically be accepted in a desktop PC as soon as the devices are within range of each other.

Bluetooth technology is fully functional even in noisy radio environments, and its voice transmissions are audible under severe conditions. The technology provides a very high transmission rate and all data are protected by advanced error-correction methods, as well as encryption and authentication routines for the user's privacy. For further information regarding Bluetooth enabled devices and the Bluetooth standard, see, the Bluetooth White Papers in Appendix A. Copies of the Bluetooth specification can be ordered by fax at: Bluetooth SIG, Fax +46 70 615 9049.

To further dispel the notion that the clients need be conventional computers, it is also possible that the clients may be located in public areas, such as, for example, at a kiosk in a shopping mall. As yet another example, computing systems or clients 1216 may include any one or more of the above mentioned portable wireless devices linked to and in communication with a central office or communications center 1218. For instance, with wireless PDAs, clients 1216 may be linked to a wireless LAN or other network via, for example, a number of transmitters and/or receivers 1219. In the same manner, a satellite phone 1216 may be linked to network 1230 via a satellite base station 1218 or the like. Again, what is important in this particular embodiment is that a user have access to  
10 main computing server 1220.

Any number of client systems 1210, 1212, 1214, or 1216 may optionally be linked or connectable to, for example, a printing or writing device 1235. In one example, writing device 1235 is used to write or encode information or data onto a storage medium, such as a chip embedded within a smart card. As another example, the storage medium may be a floppy disk or a magnetic strip located on a credit card. With portable wireless devices, the data or information may be stored directly in, for example, a hard disk drive or the like. With these PDAs, additional information may also be transmitted for storage thereon. For example, with reserved seating events, a row and section number for the reserved seats may be stored in the account as well. Thus, the seating information  
20 may be transmitted, for example, at redemption. As yet another example, the information may be coded or written onto a piece of paper forming, for example, a ticket, certificate, or receipt. With this example, the information may be encoded in a numeric code or bar code or any other similar data capable of being read by a standard bar code reader or other similar device.

Advantageously, in accordance with another embodiment, the writing device may be incorporated in a portable and/or wireless device, such as a Palm VII, computer, or the like. In this embodiment, the identification may be unique to the user and/or specific event. Thus, the device receives the ticket and stores it therein. In addition, the ticket optionally includes a unique portion or component corresponding to a unique seating arrangement for reserved seating, such as at sporting  
30 events, and/or optionally another unique portion corresponding to concession and/or other purchases.

With the architecture depicted in FIG. 15, the interconnected communications systems may exchange information using various services, such as electronic mail, Gopher, and/or the World Wide Web ("WWW"). These services allow each system including, for example, main computing server 1220 and client systems 1210, 1212, 1214, and 1216 to send information, including graphical Web

pages, to one another and other remotely located systems, where the pages may then be displayed. Using the WWW as an example, each resource or web page of the WWW is uniquely identifiable by a Uniform Resource Locator (URL). To view a specific web page, a client system specifies the URL for that web page in, for example, a HyperText Transfer Protocol (HTTP) request. HTTP is one example of an application protocol that provides users access to files using a standard page description language such as HyperText Markup Language (HTML) or Extensible Markup Language (XML). These languages provide a standard set of tags that define how a web page is to be displayed. When a user indicates to a browser implemented on, for example, client 1212, to display a web page, the browser sends a request to the server, in this case main computing server 1220, to transfer a document that defines the web page to the client. When the requested document is received by the client, the browser displays the web page as defined by the page description language. Typically, the document contains various tags that control the displaying of text, graphics, controls, and other features. The document may also contain the URLs of other web pages available on that particular server or on other server computing systems.

Although this example is described in the context of the Internet and the WWW, it is to be understood that the aspects of the present invention may be implemented utilizing other similar architectures and environments. For example, the concepts of the present invention may be implemented in an electronic mail environment where data and information or requests are transmitted in electronic mail messages between the client systems and the main computing system.

In the context of provisioning movie theatre tickets, main computing server 1220 may be accessed by remotely located users to advantageously allow the purchase of, for example, movie tickets. Similarly, main computing server 1220 is also utilizable for the purchase of concessions and other movie related merchandise. Furthermore, main computing server 1220 may advantageously be used to collect theatre patron demographic data for marketing use. As yet another example, server 1220 is capable of disseminating movie-related information as a service to theatre patrons and of providing advertising service to third party sponsors. In still yet other embodiments, main computing server 1220 may be used to facilitate an initialization process after which a user account is generated for each theatre patron. In these embodiments, each patron utilizes some sort of identification device, such as, for instance, a smart card having a machine readable identifier for uniquely identifying the user to redeem purchases. In other embodiments, an identification device already in the possession of the user is associated with an account during the initialization process. Advantageously, an identifier is used to associate the user and the identification device with a corresponding account. Of course, the identification device may take many forms. For instance, it may include a smart card or credit

card, or even a PDA or wireless phone with the identifier written to memory, and/or any other analogous devices. The device optionally stores the ticket thereon which is optionally unique to a specific event, and optionally includes a component for specific seating, concession, and/or other unique customer information/preferences.

According to the principles of the present invention, main computing server 1220 allows a remotely located user to check on movie times, seating availability, and other information, such as the movies being shown at a particular theatre, the address and/or directions to the theatre and other related information. In addition, a user may utilize main computing server 1220 to purchase tickets, concessions, and/or other merchandise as well. To purchase a ticket or other merchandise, the user conducts a credit card transaction or other similar secure transaction utilizing for example, an Internet credit/debit service, or the like. Then, the information concerning the purchase is transmitted to the theatre. To illustrate, after the purchase of a movie ticket, main computing server 1220 updates an account associated with the user which may be located locally, at the theatre server, or at another remote location or server altogether. Alternatively, main computing server 1220 may authorize printing of a ticket containing an identification code at the user's client server or optionally the encoding of ticket or account information onto, for example, a memory medium located in or on the user's smart card, PDA, or other portable device. The user's account then is accessible at a point of sale upon presentation of the identification device. Hence, the user gains admission to an event only after a movie attendant verifies the purchase of a ticket, which occurs when the attendant accesses the user's account using the identifier stored on the identification device presented by the user.

Using the smart card as an example, while at the entrance of a theatre, a user may gain admission to the movie by first presenting or motioning the smart card within the reading or transmission range of a reader. Subsequently, the reader reads the identifier embedded in the smart card, accesses the user's account and determines whether a ticket purchase has in fact been made by the user. This information is then transmitted to the theatre attendant who either admits or turns away the user based on this account information.

Also in some embodiments, additional information may be stored and transmitted to a user or theatre attendant. For example, in reserved seating venues, a section and seat number may also be stored in the user's account. In these embodiments, after accessing the account, whether it is stored on the user's identification device or on the theatre server, the seating information may be printed onto a physical receipt. Printing may be effected by a point of sale printer or by the user's device (assuming that the device possesses printing capability). The physical receipt advantageously

provides the user with evidence of purchase and may be used for entrance into particular sections, readmission into a section, or to oust other customers from the user's seat.

Although in this and other embodiments of the invention, reference is made to an attendant who verifies and admits or denies admission to the user, it is also possible within the scope of the invention to use some type of automated device in place of the attendant. For example, it is possible that the theatre attendant may be replaced with a reader and optional turnstile. In this case, the user could motion the smart card within the reading range of the reader after which the turnstile would admit the user only if a purchase has been made, or an alarm may occur to indicate that an improper entry attempt has occurred. Similarly, a concession or merchandise stand could be replaced with a reader and a candy machine-like vending device. In this case, the user could motion or insert the identification device into a reading slot after which any purchased items would be dispensed. Thus, reference to an attendant is for convenience and exemplary purposes only, and it is to be understood that the invention is intended to cover other alternatives as well. Similarly, the attendant may have access to a ticket printing device to print out a receipt, specific movie information, specialty program information, reserved seat assignments, concessions information, and the like.

Of course, the user may also purchase concessions and/or merchandise, such as clothing, movie soundtracks, toys, posters, videos, and the like in a manner similar to that described above as well. These items may then be picked up at the theatre during the event or, with merchandise, mailed to the user's home. Specifically, concession purchases follow similar procedures as the movie ticket purchases. The user collects the pre-purchased concession items and presents an identification device (e.g., a bar coded ticket, smart card, and/or other device) to the attendant at the register. Scanning the device expedites the lines by optionally eliminating the exchange of money if pre-paying for concessions and the need to enter each item into the register. As the purchase decision has already been made, that too will create a more efficient operation. Additionally, concessions may optionally be sold in "Value Packs." For example, users may be able to purchase a large soft drink, large popcorn, and a box of candy at a reduced price. "Frequent flier" purchases and bonus points may be offered as well. With merchandise, the present invention provides access to convenient, 24-hour purchases and advanced purchases. Furthermore, since purchases are made online, the product does not have to be in stock at the time of the purchase.

Optionally, the theatre, for example, may also include readers/scanners at each row or seat in the theatre. In this embodiment, the customer enters the theatre via, for example, the POS and optional auto-attendant card scanner/reader, and proceeds to sit down in the appropriate seat. At the



row or seat, the customer has his or her card scanned/read and the concession stand is alerted to the fact that the user is ready to receive any pre-paid orders. Alternatively, a user can order concessions using, for example, a wireless device, even in the theatre, and have the concession provided to the seat without waiting in line. The above embodiment is also applicable to reserved seating embodiments such as sporting events. In these embodiments, the user need not check-in at the seating location. Instead, when the user enters the reserved seating event via the POS, the POS directly notifies concessions with the user seat location stored in the system. Subsequently, the pre-purchased items may be delivered to the user's reserved seat.

- 10           Main computing server 1220 may also provide movie information using, for example, Oracle's Customer Relationship Management software products. For example, any of the following information may be provided: theatre location, descriptions, listings of the actors in the movie, a summary of the plot, movie time, a movie rating, any selected reviews, a running time, the director, and listings or groupings of movies by genre, and other similar information.

- Marketing techniques may also be facilitated by server 1220. For instance, the present invention may offer advertising, via for instance main computing server 1220, to movie studios, movie theatres, concession manufacturers, and other companies. As an example, a special entertainment theme area may be created for each sponsor including customized logos placed on  
20   various pages, contests, and/or games or sweepstakes designed to generate an electronic mailing list of entrants. Similarly, main computing server 1220 may be utilized to develop, design, program, host, maintain, promote and fulfill customized events for sponsors and provide lists of the users' email addresses. Furthermore, main computing server 1220 may be used to provide updates on the week's new films and videos. Additionally, main computing server 1220 may contain its own advertisements or advertisements from other sponsors.

- Main computing server 1220 may be used to gather and store user demographic data during an initialization or initiation process. This data may include, for example, customer/user name, age, income, address, movie preferences, theatre preferences, time preferences, zip code, movie interests,  
30   prior purchases, and may, in turn, be used by movie sponsors during subsequent marketing campaigns. Having each prospective user register demographic information on main computing server 1220, program sponsors may deploy this knowledge throughout the business to enable: user focused planning and decision making; user knowledge based marketing; and intelligent, real time interaction with users at every contact point. Furthermore, the present invention may provide the following benefits: increased sales revenue and profit; more precise demand forecasts; improved

customer retention, satisfaction and loyalty; new market/opportunity identification for business growth; rapid, centralized tracking and measurement of marketing ROI; enables a capital budget approach to marketing investments; flexibility to respond to rapidly changing marketing conditions; and improved customer service.

In a related fashion, server 1220 may be used to proactively transmit advertisements via, for example, an electronic mail message, concerning movies to a targeted user based on the user's previously entered preferences. More specifically, main computing server 1220 may be utilized to transmit a personalized email to users touting special films at local theatres based on previous movie ticket purchases. For example, if a film is entering the latter stages of its engagement and sales are lagging, the present invention may be utilized to send a personalized email message to someone who has purchased tickets for similar types of movies before and offer them an incentive to attend the screening. In addition, the identification device may also have advertisements, logos, and/or corporate sponsors, and other similar information printed on one or more surfaces.

Although in this embodiment, main computing server 1220 is described in the context of movie theatre ticket sales, it is to be understood that the concepts of the present invention are applicable to other environments as well. For instance, it is to be understood that the scope of the present invention is intended to cover other industries such as the sales of sporting event tickets in sports venues, music concerts, museums, or any other event where it may be advantageous to allow a user to purchase tickets or other items remotely. In this embodiment, the specific reserved seating information, and other customized information such as concessions, customer preferences, parking, and the like, may be stored on a wireless device (or remote account) and associated with a component of the ticket transferred to the wireless device and/or may be printed on a ticket for use during the event by the identification device or by an attendant at using a point of sale device. Additionally, other alternative or simultaneous arrangements may also be used that utilize this customized information.

To facilitate the above and other functions, main computing server 1220 implements, for example, one or more computing processes and a number of local and/or remote databases, or one or more computers or computing systems. Main computing server 1220 is advantageously linked to or connected with any number of point of sale (POS) servers 1244 and/or ticket and theatre servers 1246 located at or accessible by, for example, the theatre itself. These POS servers 1244 are located at each theatre. In contrast, theatre server 1246 may exist as a single server or as multiple servers with one or more located at each theatre. In accordance with the principles of the present invention, POS servers

1244 and/or theatre servers 1246 are linked to a number of readers 1240. These components, along with any other optional elements, collectively comprise the theatre computing system.

The theatre computing system, like main computing server 1220 implements any number of computing processes or programs and databases, either local or remote, necessary to facilitate the concepts of the present invention. In one embodiment, integration between the theatre computing system and main computing server 1220 occurs on three different levels. The first includes a physical connection between main computing server 1220 and the theatre computing system. This is accomplished by employing, for example and as discussed above, a T1 line, utilizing the Internet as a virtual private network. The second consists of, for example, a network connection using a TCP/IP Internet protocol. This network connection is secure with firewalls in place. The third consists of, for example, an Application Programming Interface. This software may be a custom piece of software built from the ground up for each theatre chain. In one example, either or both of POS server 1244 and/or theatre server 1246 serve as a gateway or entrance to the corresponding theatre computing system. Furthermore, firewall 1250 separates main computing server 1220 from the theatre computing system to facilitate secure communications.

In accordance with the principles of the present invention, the theatre computing system, like main computing server 1220, may be used to store theatre patron or user accounts. In particular, each account is associated with a user via an identifier and is used to facilitate admission of the theatre patrons. More specifically, after a user purchases a ticket, the user's account is updated. Then before gaining admission to a movie or before redeeming any merchandise, the account may be verified at the theatre utilizing, for example, an identification device presented by the user.

According to the concepts of the present invention, either main computing server 1220, theatre system, or both keep track of tickets and/or merchandise sold. Similarly, the information may alternatively or additionally be stored within the memory of a user's identification device.

The theatre computing system performs other functions as well. For instance, the theatre computing system may be used to transmit information regarding seating availability, prices, types of concessions and merchandise, and the like to theatre customers. In addition, the theatre system may be advantageously used to manage and store information regarding the operation of the theatre. For instance, the theatre system advantageously monitors ticket sales including maintaining the number of seats available for purchase, and re-tabulating inventory after each sale, as well as other management functions associated with the day-to-day operation of a movie theatre such as maintaining

merchandise inventories. Of course, in alternate embodiments, the above information and management functions may be performed by main computing server 1220 thereby easing the management burden placed on the theatre system.

According to the principles of the present invention, readers 1240, in one embodiment, include smart card readers. Of course other variations and alternatives are possible including bar code readers, infrared beam and microwave readers, credit card magnetic strip readers, biometrics scanning/capture devices such as retina or fingerprint scanners, and/or any other analogous devices. In one example, readers 1240 are located in various locations within the theatre itself including, for instance, building entrances, concessions and/or merchandise stands, or other provisioning stations, and the like. As mentioned above, readers 1240 are connected to and in communication with POS server 1244 and/or ticket/theatre server 1246, via a data communication network, including, for example, a hardwired LAN, or a wireless network utilizing any number of transceivers and/or receivers or the like. In accordance with the principles of the present invention, readers 1240 are used to read and identify each user as he or she attempts to gain admission to the theatre. In this regard, as described above, after presentation of an identification device, reader 1240 reads an identifier stored on the device and subsequently accesses the account associated with the user as identified by the identifier. At that point, the theatre attendant may verify whether a ticket has been purchased by the user and admit or deny entrance to the user, accordingly.

20

Readers 1240 serve as part of a wireless LAN bar code scanning system which provides an interactive exchange of data from anywhere in the theatre, thereby ensuring that mission critical information is visible, available and accessible while the movie theatre is selling tickets. In this embodiment, a network controller, or NCU, is created which may take the form of hardware or software and acts as a gateway between the host computer and other components of the Radio Frequency system. Gateways optimize the performance of systems with high terminal counts, network monitoring and diagnostics, screen formatting, and keyboard mapping. In addition, the NCU is available as a fault-resilient system, eliminating downtime and risk to critical theatre operations.

30

Also in this embodiment, multiple transceivers, or access points, are established in each theatre depending upon the physical size of the theatre. These transceivers and access points act as base stations that pass communications between the network controller (or host) and Radio Frequency terminals. Transceivers are used in UHF and 902-928 MHz systems, in which they receive and route messages from terminals to the network controller. These bases also transmit messages, such as instructions, back from the host to the wireless devices. Access points, typically used in 2.4 GHz

installations, are wired directly to an Ethernet or Token Ring backbone, and provide transparent access between the wired LAN and an unlimited number of wireless devices which are, in turn, used by theatre employees.

The theatre employees assigned to operate readers 1240 are equipped with, for example, a Wireless Spectrum 24 device. This device automatically downloads ticket information into the access points on a real time basis. In this example, an indicator light is used to identify invalid tickets. Each access point, which is connected to the wired LAN backbone, executes a unique hopping pattern across, for example, 78 non-overlapping frequencies. The table of 66 hopping patterns specified in the IEEE 802.11 standard minimizes the probability that one cell operates on the same frequency at the same time as another cell. This allows the access points to operate at 2Mbps without interruption-even in close proximity to one another.

One example of a purchase routine used to purchase tickets is described with reference to FIG. 16. To commence processing (step 1300), utilizing any of client systems 1210, 1212, 1214, or 1216, a user logs on to or establishes a connection to network 1230 (step 1304) and connects to main computing server 1220 (step 1308). The user may connect to server 1220 via the Internet, a private dial-up connection, or any other suitable means. After establishing a connection to main computing server 1220, the user enters subscriber information including, for instance, an identifier and/or a password (step 1312). This information is entered to facilitate secure communication between the user and main computing server 1220 by preventing third parties from accessing the user's account. In addition, the information may be used to identify repeat users as well as first time users. As such, before processing can continue, the identifier is checked for validity (step 1314). In one embodiment, main computing server 1220 checks to see whether the identifier/information has been entered before. If the information has not been previously entered, main computing server 1220 prompts or asks the user whether he or she wishes to subscribe (step 1322). If the user wishes to subscribe, processing proceeds with a new subscriber or initialization routine (step 1326). On the other hand, if the user does not wish to subscribe, processing ends (step 1330).

30

If the validity check (step 1314) indicates that the user is not a first time user, processing continues, optionally, with the establishment of a connection to ticket/theatre server 1246 (step 1334). From there, the user interactively enters a number of requests including, for example, a particular movie or a conveniently located theatre, or any other analogous request. In the embodiment depicted in FIG. 16, a list of movie theatres is displayed (step 1338) and the user is prompted to select a

particular theatre (step 1342). Of course other processing routines are possible. For instance, it is possible to prompt the user for a desired movie in response to which a listing of theatres showing the desired movie is displayed. Likewise, it is also possible to prompt the user for a desired theatre in response to which a listing of movies showing in the selected theatre is displayed. Other routines are similarly possible.

Returning to the example of FIG. 16, after selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 1346) for selection by the user (step 1350). Likewise, a listing of concessions may also be displayed now or at some other point in processing. Similarly, at 10 any time during processing a listing of merchandise and/or advertisements may be displayed. Additionally, the user may, at any time, opt into or enter a concessions or merchandise menu where these purchases may be made. Furthermore, the user may optionally at any time access additional information regarding the movie, or the theatre or any other similar information. For instance, before making a movie selection, the user may wish to read a critic's review or check the rating of the movie and purchase beverages. Likewise, the user may wish to find out where the theatre is located and determine the ticket prices and seating availability.

After selecting a movie title (step 1350), the main computing server or the theatre system (either or both of POS server 1244 and ticket/theatre server 1246) check to see whether the desired 20 number of seats is available (step 1354). If the desired number of seats is not available, indication is so made and the user is prompted for another selection. However, if the desired number of seats is available, the user is, optionally, prompted for any additional movie and/or concession/merchandise selections or purchases (step 1358).

Once all desired selections or purchases have been made, ticket server 1246 updates POS server 1244 by transmitting information identifying these purchases (step 1362). For example, if a user purchased four tickets along with popcorn and beverages, ticket server 1246 would transmit this information along with the user's identifier to a POS server 1244 located at the theatre selected by the user. The POS server 1244 would then access and update the user's account using the corresponding 30 identifier. To gain admission to the theatre, the user merely presents his or her identification device to a theatre attendant. The attendant then verifies that purchases have indeed been made by reading the identification device at one of readers 1240. After reading the identification device, the attendant accesses the user's account and verifies ticket purchase before admitting or turning away the user. Alternatively, as suggested above, instead of or in addition to storing information in an account located on main computing server 1220, ticket/theatre server 1246, or POS server 1244, the account

information can also be stored on the user's identification device by, for instance, writing the information to memory and/or directly stored on a device or wireless device having such capability. Similarly, the information can just as easily be embedded or encoded onto a disposable medium such as paper, in the form of a ticket or receipt.

After updating POS servers 1240, theatre/ticket server 1246 notifies main computing server 1220 that the user's account information has been updated (step 1366). At that point, the purchase routine is optionally completed by collecting payment information (step 1370). This information typically includes credit card information, but may also include information pertaining to other  
10 alternatives, such as utilizing or participating in an Internet credit service, establishing a credit account directly with the system sponsor, or other similar plans. After completing the purchase routine, processing ends (step 1330).

Another example of an architecture utilizable for implementing the features of the present invention is depicted in FIG. 17. In this embodiment, client systems 1810, 1812, 1814, and 1816, communications network 1830, private network 1834, cable modems 1811, transmitters and/or receivers 1819, and central office or communications center 1818 are similar to the corresponding components shown in FIG. 15, and thus are not described again. Advantageously, in the embodiment of FIG. 17, POS theatre server 1844 and readers 1846 are individually connected to network 1830 and  
20 to one another. In addition, each are protected by firewalls 1850a and 1850b respectively. As a result, a user may directly access either POS theatre server 1844 or reader 1846 via network 1830.

In this embodiment, management responsibilities and functions are advantageously passed onto POS server 1844 and readers 1846. Thus, either or both of POS server 1844 and/or readers 1846 are responsible for initializing and maintaining user accounts, provisioning tickets, maintaining seat and merchandise inventory, storing survey data, and/or any other similar functions. Similarly, in this embodiment, any or all of the functions of the main computing server of the embodiment of FIG. 15 are performed by either or both of POS server 1844 and/or readers 1846. Thus, either or both of POS server 1844 and/or readers 1846 may be adapted to perform the online sales of merchandise and  
30 concessions, advertising (including customized e-mails), information management, and/or initialization functions of the present invention.

This embodiment may be used in addition to or in conjunction with the main computing server of FIG. 15 to result in a fault tolerant system. Thus, if main computing server 1220 were to fail, processing could continue without any disruption to system users.

One example of a purchase routine utilizable in this embodiment is illustrated in FIG. 18. To commence the purchase routine (step 1900), a user utilizes any of client systems 1810, 1812, 1814, or 1816, to log on to or establish a connection with POS server 1844 (step 1904). As with any of the above embodiments, the user may connect to POS server 1844 via the Internet or any private dial-up connection. After establishing a connection to POS server 1844, the user enters subscriber information including, for instance, an identifier and/or a password. This information is entered to facilitate secure communication between the user and POS server 1844 by preventing third parties from accessing the user's account. Consequently, before processing can continue, the identifier is  
10 checked for validity (step 1908).

Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request. Furthermore, the interactive display also allows data to be collected from the user (step 1912). In addition, as with any of the above examples, numerous advertisements or other banners may also be displayed. In the embodiment depicted in FIG. 18, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 1916). Of course other processing routines are possible. For instance, as mentioned above, it is possible to prompt the user for a desired movie in response to which a listing of theatres showing the  
20 entered movie is displayed. Likewise, it is also possible to prompt the user for a desired movie genre in response to which a listing of movies falling into that genre is displayed. Other routines are similarly possible.

After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 1920) for the user's selection (step 1924). If the user fails to make a selection, for example, because all of the seats in the theatre have already been sold, processing ends (step 1928). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 1932). Additionally, the user may, at any time, opt into or enter a concession or merchandise menu where these purchases may be made. Furthermore, the user may optionally at any  
30 time access additional information regarding the movie, or the theatre or any other similar information.

In this embodiment, once all desired selections have been made (step 1936), the user is optionally prompted for an additional or alternative identifier to be associated with the purchases (step 1940). The additional identifier may belong to the user, or it may belong to someone else. The



identifier may alternatively be associated with an account or individuals within an account and include its own set of privileges/preferences. This feature is convenient for parents seeking to ensure that their children are spending money on movies and not other items, or to ensure that their children are viewing non-objectionable movies. In addition, this feature also provides tracking within an account as to the specific individuals that are utilizing the account in a specific manner or preference. Whatever the case may be, POS server 1844 waits until an identifier is received (step 1944) before closing the transaction by making payment arrangements (step 1948). Again, at any time, advertisements and other banners may be displayed (step 1952).

- 10       The routine continues, then, with POS server 1844 updating the account information at each reader 1846 (step 1956). Processing ends once updating is complete (step 1928). Once again, instead of or in addition to storing information in an account located on POS server 1844, and/or readers 1846, the account information can be stored on the user's device by, for instance, writing the information to memory.

- One example of the process used to redeem a ticket purchased according to this embodiment is discussed with reference to FIG. 19. In this procedure, processing starts (step 2000) with the presentation of an identification device by the user to a movie theatre attendant (step 2004). Subsequently, the device is read by reader 1846 (step 2008). Using a smart card as an example,
- 20       reading may be effected by moving or motioning the identification device into a reading range of reader 1846. In other cases, reading may be effected by sliding a magnetic strip over a reading device. Alternatively, the reading may include passing a ticket having a bar code encoded onto a surface under a bar code reader. As yet another alternative, reading may be effected by passing a paper ticket or receipt having a code printed on one surface to an attendant who then visually inspects the code and accesses an account using, for example, a computer located at the theatre.

- Using the identifier read from the identification device, the attendant accesses the user's account to determine whether a ticket purchase has in fact been made by the user. As discussed above, the account not only indicates ticket information, but may also include information regarding
- 30       concession or merchandise purchases as well. Based on this account information, the user is either admitted or turned away. In particular, after reading the identifier, the identifier is checked for validity (step 2012). If the identifier is invalid, for example, because a ticket has not been purchased or because of an equipment failure, entry is denied (step 2016). Other possible reasons for invalidity could exist if the user has become delinquent with payments or because the account has never been activated. Whatever the reason, the theatre attendant then optionally directs the user to customer

assistance (step 2020) where another attendant or customer service representative can attempt to resolve the problem (step 2024). If entry is denied because the account has not been activated, the user may be asked to subscribe. Furthermore, also at this time, addition promotional incentives may be brought to the user's attention (step 2028). For instance, it may be possible to award the user bonus credits for subscribing at that time. Additionally, the user may be given an opportunity to join a "frequent movie" club, where users are awarded bonus credits utilizable toward additional movies or merchandise based on the amount spent. Afterward, if the user has decided to subscribe he or she may return to the theatre entrance to recommence the admission process (step 2004), or if the problem was not able to be resolved, processing terminates (step 2032).

10

Returning to step 2012, if the identifier is valid, the user is admitted (step 2036). Then, if no other purchases have been made, the user proceeds to the theatre (step 2052). However, if the user has made additional purchases (step 2040), such as, for instance, merchandise or concessions, he or she is directed to a customer station where the items may be retrieved. At the station, the user presents the identification device to an attendant who then accesses the user's account (step 2044). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 2048). From there, the user proceeds to the theatre (2052) and processing ends (step 2032).

20

FIG. 20 depicts a combined architecture and process diagram used to illustrate some of the concepts of another embodiment of the invention. Initially, from a client system such as, for instance, a personal computer 2101, a user commences the process by transmitting a transaction request to POS theatre 2110 via network 2106 (steps 2104 and 2108). Included with the request, among other things, are the user's identification and information regarding, for example, a movie selection, time, location, merchandise, and/or concessions. In conjunction with the user's request, POS theatre 2110 interactively responds to the user's inquires, displays messages and advertisements, and finalizes the transaction by, for example, transmitting confirmation information (steps 2112 and 2116).

30

Subsequently, POS theatre 2110 updates the account information associated with the user. For example, POS theatre 2110 updates any local databases, as well as databases/accounts located at any concession stands 2130 (step 2128) and/or readers 2122 (step 2120). Optionally, in response to the POS theatre's transmissions, concession stand 2130 and reader 2122 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 2124 and 2132).

Shortly before show time, the user arrives at the theatre with identification device in hand. In this embodiment, the identification device includes a smart card 2146 with an identifier stored in a memory chip. To gain admission to the theatre, the user presents smart card 2146 to an attendant who then accesses the user's account (step 2136). After checking the user's account, the attendant either admits or denies admission to the user based on the information contained in the account (step 2140). A similar procedure is used to obtain merchandise and concessions. Specifically, the user presents his or her smart card to an attendant at concession stand 2130 (step 2144). The smart card is read, the account is accessed, and products are delivered to the user in accordance with the user's account (step 2148). Furthermore, although POS theatre 2110, reader 2122, and concession stand 2130 are depicted as being separate elements, it is to be understood that in this and other embodiments they may also exist as a single component.

FIG. 21 depicts another purchase routine in which an electronic ticket is stored onto a user's identification device. To commence this purchase routine (step 2200), a user utilizes any of the above described client systems, to log on to or establish a connection with a POS server and/or directly to the POS (step 2204). As with the above embodiments, after establishing a connection to the POS server, the user enters subscriber information including, for instance, an identifier and/or a password. The identifier is then checked for validity (step 2208).

Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request and to allow data to be collected from the user (step 2212). In addition, as with any of the above examples, numerous advertisements or other banners may also be displayed. In the embodiment depicted in FIG. 21, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 2216). Of course other processing routines are possible. For instance, as mentioned above, it is possible to prompt the user for a desired movie in response to which a listing of theatres showing the entered movie is displayed. Other routines are similarly possible.

After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 2220) for the user's selection (step 2224). If the user fails to make a selection, processing ends (step 2228). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 2232). Additionally, the user may, at any time, opt into or enter a concession or merchandise menu where these purchases may be made. Furthermore, the user

may optionally at any time access additional information regarding the movie, or the theatre or any other similar information.

Once all desired selections have been made (step 2236), an electronic ticket (e-ticket) is transmitted to the user (step 2240). The electronic ticket preferably is encrypted or includes some sort of watermark to ensure originality and to prevent counterfeits. The e-ticket is then stored onto the user's identification device or smart card, using a writing device or the like (step 2244). Again, as mentioned above, advertisements may be displayed at any time, including during the closing transaction where payment information is forwarded to the POS server (step 2252). The routine  
10 continues, then, with POS server optionally updating the account information at each reader (step 2256). Processing ends, once updating is complete (step 2228).

One example of a process used to redeem a ticket is discussed with reference to FIG. 22. In this procedure, processing starts (step 2300) with the presentation of the smart card by the user to a movie theatre attendant (step 2304). Subsequently, the card is read by a reader (step 2308). Reading may be effected by, for example, motioning the card within a reading range of the reader. By reading the card, account information is transmitted from the card to the reader and/or POS directly or optionally via a POS server or other communication/connection. The account information read from the smart card may then be used during the admission process or to update the server's records.  
20

Using the reader, an attendant accesses the user's account to determine whether a ticket purchase has in fact been made. As discussed above, the account not only indicates ticket information, but may also include information regarding concession or merchandise purchases as well. Based on this account information, the user is either admitted or turned away. In particular, after reading the account information, the identifier is checked for validity (step 2312). If the identifier is invalid because a ticket has not been purchased or because of equipment failure, entry is denied (step 2316). Then the theatre attendant may direct the user to customer assistance (step 2320) where another attendant or customer service representative can attempt to resolve the problem (step 2324). If entry is denied because the account has not been activated, the user may be asked to  
30 subscribe and purchase a ticket. Furthermore, also at this time, addition promotional incentives may be brought to the user's attention (step 2328). Afterward, if the user has decided to subscribe he or she may return to recommence the admission process (step 2304). Otherwise, if the problem was not resolved, processing ends (step 2332).

Returning to step 2312, if the identifier is valid, the user is admitted (step 2336). Then, if no other purchases have been made, the user proceeds to the theatre (step 2352). However, if the user has made additional purchases (step 2340), such as, for instance, merchandise or concession purchases, he or she is directed to a customer station where the items may be retrieved. At the station, the user presents the identification device to an attendant who then accesses the user's account stored on the user's smart card (step 2344). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 2348). From there, the user proceeds to the theatre (2352) and processing ends (step 2332).

10 Furthermore, in any of the embodiments of the present invention, readers may be installed on the theatre seats for use in delivering concessions during or before the movie. With this optional feature, instead of picking up concessions at a concession stand, the user selects a seat, inserts his or her smart card into a smart card reader accessible from the seat to facilitate delivery of the concessions. More particularly, the reader uniquely identifies the selected seat and facilitates the delivery of the purchased concessions directly to the user.

FIG. 23 depicts a combined architecture and process diagram used to illustrate some of the concepts of this particular embodiment. Initially, from a client system such as, for instance, personal computer 2401, a user commences the process by transmitting a transaction request to POS theatre  
20 2410 or optionally via a POS server and then to POS theatre 2410 or other communication method via network 2406 (steps 2404 and 2408). Included with the request, among other things, are the user's identification information regarding, for example, a movie selection, time, location, merchandise, and/or concessions. As part of the user's request, POS theatre 2410 interactively responds to the user's inquires, displays messages and advertisements, and finalizes the transaction by transmitting an e-ticket to client 2401 (steps 2412 and 2416). In accordance with the principles of the present invention, the e-ticket, then, is written or encoded onto the user's smart card using writer/reader 2422 (step 2420).

Subsequently, POS theatre 2410 optionally updates the account information associated with  
30 the user. For example, POS theatre 2410 updates any local databases, as well as databases/accounts located at any concession stands 2434 (step 2432) and/or readers 2426 (step 2424). Optionally, in response to the POS theatre's transmissions, concession stand 2434 and reader 2426 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 2436 and 2428).

Shortly before show time, the user arrives at the theatre with smart card 2446 in hand. To gain admission to the theatre, the user presents smart card 2446 to an attendant who then accesses the user's account stored conveniently on the smart card and/or on system memory (step 2440). After checking the user's account, the attendant either admits or denies admission to the user based on the information contained in the account (step 2444). A similar procedure is used to obtain merchandise and concessions. In particular, the user presents his or her smart card to an attendant at concession stand 2434 (step 2448). The smart card is read, the account is accessed, and products are delivered to the user in accordance with the user's account (step 2452).

- 10        An example of another embodiment of a purchase routine utilizing a wireless device is illustrated in FIG. 24. To commence the purchase routine (step 2500), a user utilizes a wireless device including, for example, a Bluetooth enabled device, to log on to or establish a connection with the POS server (step 2504). As discussed above, the user may connect to the POS server via a transmitting/receiving tower or any other suitable means. After establishing a connection to the POS server, the user enters subscriber information including, for instance, an identifier and/or a password associated with the user and his or her wireless device. The identifier is then checked for validity (step 2508).

- 20        Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests from his or her wireless device including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request (step 2512). In this embodiment, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 2516).

- After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 2520) for the user's selection (step 2524). If the user fails to make a selection, processing ends (step 2528). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 2532). Additionally, the user may, at any time, opt into or enter a concession or merchandise menu where these purchases may be made. Furthermore, the user  
30        may optionally at any time access additional information regarding the movie, or the theatre or any other similar information.

Once all desired selections have been made (step 2536), an e-ticket is optionally transmitted to the user (step 2540). Again, the e-ticket preferably is encrypted or includes some sort of watermark to ensure originality and to prevent counterfeits. The e-ticket is then stored in, for example, main

memory of the user's wireless device (step 2548). Again, as mentioned above, advertisements may be displayed at any time, including during the closing transaction where payment information is forwarded to the POS server and POS at the theatre or directly to the POS theatre (step 2552). The routine continues, then, with POS server optionally updating the account information at each reader (step 2556). Processing ends, once updating is complete (step 2528).

One example of the process used to redeem a ticket purchased according to this embodiment is discussed with reference to FIG. 25. In this procedure, processing starts (step 2600) with the presentation of the wireless device by the user to a movie theatre attendant (step 2604). Subsequently,  
10 the wireless device is read by a reader (step 2608). Reading may be effected by, for example, transmitting information via an infrared transmission to the reader. In this manner, an identifier, account information, or e-ticket information is transmitted from the wireless device to the reader and/or POS server, which may then be used during the admission process and/or to update the server's records.

The attendant next accesses the user's account to determine whether a ticket purchase has in fact been made. As discussed above, the account not only indicates ticket information, but may also include information regarding concession or merchandise purchases as well. Based on this account information, the user is either admitted or turned away. In particular, an identifier retrieved from the  
20 account information is first checked for validity (step 2612). If the identifier is invalid because a ticket has not been purchased or because of equipment failure, entry is denied (step 2616). Then the theatre attendant may direct the user to customer assistance (step 2620) where another attendant or customer service representative can attempt to resolve the problem (step 2624). If entry is denied because the account has not been activated, the user may be asked to subscribe and purchase a ticket. Furthermore, additional promotional incentives may at this time be brought to the user's attention (step 2628). Afterward, if the user has decided to subscribe he or she may return to the theatre entrance to recommence the admission process (step 2604), or if the problem was not resolved, processing ends (step 2632).

30 Returning to step 2612, if the identifier is valid, the user is admitted (step 2636). Optionally, for reserved seating embodiments, a receipt or seating confirmation may be printed by either the attendant or the user's identification device for use in gaining admission to the actual seat, as proof of purchase against other customers, or for readmission. Then, if no other purchases have been made, the user proceeds to the theatre (step 2652). However, if the user has made additional purchases (step 2640), such as, for instance, merchandise or concessions, he or she is directed to a customer station

where the items may be retrieved. At the station, the user presents the wireless device to an attendant who then accesses the user's account stored on the user's wireless device (step 2640). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 2648). From there, the user proceeds to the theatre (2652) and processing ends (step 2632).

Furthermore, in any of the embodiments of the present invention, readers may be installed on the theatre seats for use in delivering concessions during or before the movie. With this optional feature, instead of picking up concessions at a concession stand, the user selects a seat, and transmits an identifier from his or her wireless device into a reader accessible from the seat to facilitate delivery of the concessions. More particularly, the reader uniquely identifies the selected seat. Subsequently, the purchased concessions are delivered directly to the user.

FIG. 26 depicts a combined architecture and process diagram used to illustrate some of the concepts of this particular embodiment. Initially, from the user's wireless device 2701, the user commences the process by transmitting a transaction request to POS theatre 2710 directly or via a POS server via transmitter 2702, wireless base station 2703, and network 2706 (steps 2704 and 2708). Included with the request, among other things, are the user's identification and requests regarding, for example, a movie selection, time, location, merchandise, and/or concessions. As part of the user's request, POS theatre 2710 interactively responds to the user's inquires, displays advertisements and messages, and finalizes the transaction by transmitting an e-ticket to wireless device 2701 (steps 2712 and 2716).

In accordance with the principles of the present invention, the e-ticket, then, is written or stored onto memory of the user's wireless device 2701. Subsequently, POS theatre 2710 optionally updates account information associated with the user. For example, POS theatre 2710 updates any local databases, as well as databases/accounts located at any concession stands 2730 (step 2728) and/or readers 2722 (step 2720). Optionally, in response to the POS theatre's transmissions, concession stand 2730 and reader 2722 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 2732 and steps 2724).

Shortly before show time, the user arrives at the theatre with his or her wireless device 2701. To gain admission to the theatre, the user transmits an identifier or account information via, for example, an infrared transmission to a reader (step 2736). After checking the user's account, an attendant either admits or denies admission to the user based on the information contained in the account (step 2740). A similar procedure is used to obtain merchandise and concessions. In



particular, the user transmits account information via, for example, an infrared transmission to a reader at a concession stand 2730 (step 2748). An attendant then accesses the account, and products may subsequently be delivered to the user (step 2744).

FIG. 27 depicts yet another flowchart of another embodiment of a process of the present invention. In FIG. 27, the user starts (step 2800) by clicking on to or connecting with main computing server 1220 and optionally fills out a registration form (step 2804). While connected to main computing server 1220, the user selects a movie and pays for the ticket with a credit card or other means, in a secure e-commerce transaction (step 2808).

10

Subsequently, a unique bar coded ticket or e-ticket is generated (step 2812), which the user prints out (step 2816). Alternatively, if the user is using a smart card, his or her account is charged for the particular movie (step 2820). With the bar coded ticket, or smart card, in hand, the moviegoer avoids the box office and proceeds directly to an attendant who collects the tickets or smart card at the movie screen (step 2824 or 2828).

An optional scanner is provided to the theatre attendant who, rather than ripping the ticket stub in half, simply scans the bar code of the ticket, or smart card, with the scanner (step 2832). From there, the user proceeds into the theatre and processing ends (step 2836).

20

This process is replicated for concessions and can be used for other venues, such as sporting, theatre and other cultural events. The bar coded system can be used in any area or venue to avoid long lines, which includes shopping.

FIG. 28 depicts another purchase routine utilizing biometrics information/data as the user's identification device and/or identifier. In this embodiment, biometrics, or physiological or behavioral aspects of the human body, are used for authentication or identification after a purchase. In these embodiments, any aspect may be utilized including, for example, finger or thumb prints, iris or retina images, electronic signatures, voice or facial scans, hand scans, and or any other similar features. To commence this purchase routine (step 3000), a user utilizes any of the above described client systems, to log on to or establish a connection with a POS server and/or directly to the POS (step 3004). As with the above embodiments, after establishing a connection to the POS server, the user enters subscriber information including, for instance, an identifier and/or a password. The identifier is then checked for validity (step 3008).

30

Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request and to allow data to be collected from the user (step 3012). In addition, as with any of the above examples, numerous advertisements or other banners may also be displayed. In this embodiment, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 3016). Of course other processing routines are possible.

10 After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 3020) for the user's selection (step 3024). If the user fails to make a selection, processing ends (step 3028). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 3032). Additionally, the user may, at any time, opt into or enter a concession or merchandise menu where these purchases may be made. Furthermore, the user may optionally at any time access additional information regarding the movie, or the theatre or any other similar information.

20 Once all desired selections have been made (step 3036), a receipt and/or an e-ticket is optionally transmitted to the user, and may be printed at the user's convenience (step 3040). Again, as mentioned above, advertisements may be displayed at any time, including during the closing transaction where payment information is optionally forwarded to the POS server (step 3052). The routine continues, then, with POS server optionally updating the account information at each reader or scanning device (step 3056). Furthermore, in these embodiments, each account is associated with a piece of biometrics information. For example, an account may utilize a user's fingerprint or retina image as an identifier. Processing ends, once updating of these accounts is complete (step 3028).

30 One example of a process used to redeem this purchase is discussed with reference to FIG. 29. In this procedure, processing starts (step 3100) with the arrival of the user at a POS scanner/reader (step 3104). Subsequently, the user's biometrics information is scanned or captured by an automated or attendant operated scanner/reading device (step 3108). Reading may be effected by, for example, scanning the user's eye, or collecting the user's signature, scanning the user's voice or face or any other similar aspect.

After scanning, for example, the user's retina, an attendant gains access to the user's account as identified by the retina image (stored for example in the server and accessed via a network linked to the scanner) to determine whether a ticket purchase has in fact been made. As discussed above, the

account not only indicates ticket information, but may also include information regarding concession or merchandise purchases as well. Based on this account information, the user is either admitted or turned away. After gathering the biometrics information, the account is checked for validity (step 3112). If the account is invalid because a ticket has not been purchased or because of equipment failure, entry is denied (step 3116). Then the theatre attendant may direct the user to customer assistance (step 3120) where another attendant or customer service representative can attempt to resolve the problem (step 3124). If entry is denied because the account has not been activated, the user may be asked to subscribe and purchase a ticket. After deciding to purchase a ticket, the user's biometrics information is collected via, for example, a capture device, and stored in the theatre/POS servers and/or each individual reader (step 3128). Afterward, if the user has decided to subscribe he or she may return to recommence the admission process (step 3104). Otherwise, if the problem was not resolved, processing ends (step 3132).

Returning to step 3112, if the account is valid and a ticket has been purchased, the user is admitted (step 3136). Then, if no other purchases have been made, the user proceeds to the theatre (step 3152). However, if the user has made additional purchases (step 3140), such as, for instance, merchandise or concession purchases, he or she is directed to a customer station where the items may be retrieved. At the station, the user again has his or her biometrics information scanned by an attendant or by an auto-attendant which then accesses the user's account (step 3144). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 3148). From there, the user proceeds to the theatre (3152) and processing ends (step 3132).

FIG. 30 depicts a combined architecture and process diagram used to illustrate some of the concepts of this particular embodiment. Initially, from a client system such as, for instance, personal computer 3201, a user commences the process by transmitting a transaction request to POS theatre 3210 or optionally via a POS server and then to POS theatre 3210 or other communication method via network 3206 (steps 3204 and 3208). Included with the request, among other things, are the user's biometrics information and purchase information regarding, for example, a movie selection, time, location, merchandise, and/or concessions. As part of the user's request, POS theatre 3210 interactively responds to the user's inquiries, displays messages and advertisements, and finalizes the transaction by optionally transmitting an e-ticket or receipt to client 3201 (steps 3212 and 3216). In accordance with the principles of the present invention, the e-ticket, then, is printed at the user's convenience.

Also in this embodiment, biometrics information may be captured at, for example, the user's PC 3201 via, for example a scanner or other capture device 3218. Subsequently, this information may be transmitted with order information for use in establishing an account. Alternatively, a theatre capture device 3220 linked to POS theatre 3210 or some other scanning device connected to network 3206 may be used in an initialization process to gather biometrics information, which may then be associated with an account stored in, for example, server 3210.

Subsequently, POS theatre 3210 optionally updates the account information associated with the user. For example, POS theatre 3210 updates any local databases, as well as databases/accounts  
10 located at any concession stands 3234 (step 3232) and/or readers 3226 (step 3224). Optionally, in response to the POS theatre's transmissions, concession stand 3234 and reader 3226 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 3236 and 3228).

Shortly before show time, the user arrives at the theatre. To gain admission to the theatre, an attendant scans the user's biometrics data 3246 to access the user's account (step 3240). After checking the user's account, the attendant either admits or denies admission to the user based on the information contained in the account (step 3244). A similar procedure is used to obtain merchandise and concessions. In particular, the user's information is again scanned by an attendant at concession  
20 stand 3234 (step 3248). The account is accessed, and products are delivered to the user in accordance with the user's account (step 3252).

Viewed externally in FIG. 31, a computer system designated by reference numeral 40 has a computer 42 having disk drives 44 and 46. Disk drive indications 44 and 46 are merely symbolic of a number of disk drives which might be accommodated by the computer system. Typically, these would include a floppy disk drive 44, a hard disk drive (not shown externally) and a CD ROM indicated by slot 46. The number and type of drives vary, typically with different computer configurations. Disk drives 44 and 46 are in fact optional, and for space considerations, are easily  
30 omitted from the computer system used in conjunction with the production process/apparatus described herein.

The computer system also has an optional display upon which information screens may be displayed. In some situations, a keyboard 50 and a mouse 52 are provided as input devices through which a user's actions may be inputted, thus allowing input to interface with the central processing unit 42. Then again, for enhanced portability, the keyboard 50 is either a limited function keyboard or

omitted in its entirety. In addition, mouse 52 optionally is a touch pad control device, or a track ball device, or even omitted in its entirety as well, and similarly may be used to input a user's selections. In addition, the computer system also optionally includes at least one infrared transmitter and/or infrared receiver for either transmitting and/or receiving infrared signals, as described below.

FIG. 32 illustrates a block diagram of the internal hardware of the computer system 40 of FIG. 31. A bus 56 serves as the main information highway interconnecting the other components of the computer system 40. CPU 58 is the central processing unit of the system, performing calculations and logic operations required to execute the processes of the instant invention as well as other programs. Read only memory (ROM) 60 and random access memory (RAM) 62 constitute the main memory of the computer. Disk controller 64 interfaces one or more disk drives to the system bus 56. These disk drives are, for example, floppy disk drives such as 70, or CD ROM or DVD (digital video disks) drive such as 66, or internal or external hard drives 68. As indicated previously, these various disk drives and disk controllers are optional devices.

A display interface 72 interfaces display 48 and permits information from the bus 56 to be displayed on the display 48. Again as indicated, display 48 is also an optional accessory. For example, display 48 could be substituted or omitted. Communications with external devices, for example, the other components of the system described herein, occur utilizing communication port 74. For example, optical fibers and/or electrical cables and/or conductors and/or optical communication (e.g., infrared, and the like) and/or wireless communication (e.g., radio frequency (RF), and the like) can be used as the transport medium between the external devices and communication port 74. Peripheral interface 54 interfaces the keyboard 50 and the mouse 52, permitting input data to be transmitted to the bus 56. In addition to the standard components of the computer, the computer also optionally includes an infrared transmitter 78 and/or infrared receiver 76. Infrared transmitters are optionally utilized when the computer system is used in conjunction with one or more of the processing components/stations that transmits/receives data via infrared signal transmission. Instead of utilizing an infrared transmitter or infrared receiver, the computer system may also optionally use a low power radio transmitter 80 and/or a low power radio receiver 82 as shown in the alternate embodiment of FIG. 33. The low power radio transmitter transmits the signal for reception by components of the production process, and receives signals from the components via the low power radio receiver. The low power radio transmitter and/or receiver are standard devices in industry.

FIG. 34 is an illustration of an exemplary memory medium 84 which can be used with disk drives illustrated in FIGS. 31-33. Typically, memory media such as floppy disks, or a CD ROM, or a digital video disk will contain, for example, a multi-byte locale for a single byte language and the program information for controlling the computer to enable the computer to perform the functions described herein. Alternatively, ROM 60 and/or RAM 62 illustrated in FIGS. 31-33 can also be used to store the program information that is used to instruct the central processing unit 58 to perform the operations associated with the instant processes.

10 Although computer system 40 is illustrated having a single processor, a single hard disk drive and a single local memory, the system 40 is optionally suitably equipped with any multitude or combination of processors or storage devices. Computer system 40 is, in point of fact, able to be replaced by, or combined with, any suitable processing system operative in accordance with the principles of the present invention, including sophisticated calculators, and hand-held, laptop/notebook, mini, mainframe and super computers, as well as processing system network combinations of the same.

Conventional processing system architecture is more fully discussed in Computer Organization and Architecture, by William Stallings, MacMillan Publishing Co. (3rd ed. 1993); conventional processing system network design is more fully discussed in Data Network Design, by 20 Darren L. Spohn, McGraw-Hill, Inc. (1993), and conventional data communications are more fully discussed in Data Communications Principles, by R.D. Gitlin, J.F. Hayes and S.B. Weinstein, Plenum Press (1992) and in The Irwin Handbook of Telecommunications, by James Harry Green, Irwin Professional Publishing (2nd ed. 1992). Each of the foregoing publications is incorporated herein by reference. Alternatively, the hardware configuration is, for example, arranged according to the multiple instruction multiple data (MIMD) multiprocessor format for additional computing efficiency. The details of this form of computer architecture are disclosed in greater detail in, for example, U.S. Patent No. 5,163,131; Boxer, A., Where Buses Cannot Go, IEEE Spectrum, February 1995, pp. 41-45; and Barroso, L.A. et al., RPM: A Rapid Prototyping Engine for Multiprocessor Systems, IEEE Computer February 1995, pp. 26-34, all of which are incorporated herein by reference.

30

In alternate preferred embodiments, the above-identified processor, and, in particular, CPU 58, may be replaced by or combined with any other suitable processing circuits, including programmable logic devices, such as PALs (programmable array logic) and PLAs (programmable logic arrays). DSPs (digital signal processors), FPGAs (field programmable gate arrays), ASICs (application specific integrated circuits), VLSIs (very large scale integrated circuits) or the like.

FIG. 35 is an illustration of the architecture of the combined Internet, POTS (plain, old, telephone service), and ADSL (asymmetric, digital, subscriber line) for use in accordance with the principles of the present invention. Furthermore, it is to be understood that the use of the Internet, ADSL, and POTS are for exemplary reasons only and that any suitable communications network may be substituted without departing from the principles of the present invention. This particular example is briefly discussed below.

10 In FIG. 35, to preserve POTS and to prevent a fault in the ADSL equipment 254, 256 from compromising analog voice traffic 226, 296 the voice part of the spectrum (the lowest 4 kHz) is separated from the rest by a passive filter, called a POTS splitter 258, 260. The rest of the available bandwidth - - from about 10 kHz to 1 MHz - - carries data at rates up to 6 bits per second for every hertz of bandwidth from data equipment 262, 264, and 294. The ADSL equipment 256 then has access to a number of destinations including significantly the Internet 220 or other data communications networks, and other destinations 270, 272.

To exploit the higher frequencies, ADSL makes use of advanced modulation techniques, of which the best known is the discrete multitone (DMT) technology. As its name implies, ADSL transmits data asymmetrically - - at different rates upstream toward the central office 252 and  
20 downstream toward the subscriber 250.

Cable television providers are providing analogous Internet service to PC users over their TV cable systems by means of special cable modems. Such modems are capable of transmitting up to 30 Mb/s over hybrid fiber/coax system, which use fiber to bring signals to a neighborhood and coax to distribute it to individual subscribers.

Cable modems come in many forms. Most create a downstream data stream out of one of the 6-MHz TV channels that occupy spectrum above 50 MHz (and more likely 550 MHz) and carve an upstream channel out of the 5-50-MHz band, which is currently unused. Using 64-state quadrature  
30 amplitude modulation (64 QAM), a downstream channel can realistically transmit about 30 Mb/s (the oft-quoted lower speed of 10 Mb/s refers to PC rates associated with Ethernet connections). Upstream rates differ considerably from vendor to vendor, but good hybrid fiber/coax systems can deliver upstream speeds of a few megabits per second. Thus, like ADSL, cable modems transmit much more information downstream than upstream. Then Internet architecture 220 and ADSL architecture 254, 256 may also be combined with, for example, user networks 222, 224, and 228.

In accordance with the principles of the present invention, in one example, a main computing server implementing the process of the invention may be located on one or more computing nodes or terminals (e.g., on user networks 222, 224, and 228 or system 240). Then, various users may interface with the main server via, for instance, the ADSL equipment discussed above, and access the information and processes of the present invention from remotely located PCs. As illustrated in this embodiment, users may access or use or interact with the computer assisted program in computer system 40 via various access methods. Databases 85, 86, 87, 88, and 40 are accessible via, for example computer system 40 and may be used in conjunction with client manager module 91, tracking module 92, smart card readers 93, for the various functions described above.

The above embodiments are only to be construed as examples of the various different types of computer systems that may be utilized in connection with the computer assisted-implemented process for purchasing and provisioning items over global and/or local networks.

The many features and advantages of the invention are apparent from the detailed specification, and thus, it is intended by the appended claims to cover all such features and advantages of the invention which fall within the true spirit and scope of the invention. Further, since numerous modifications and variations will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation illustrated and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.



CLAIMS

What is claimed is:

1. A method for purchasing and provisioning admittance to entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof, to an event customer via a data communication network, said method comprising:

receiving a communication from said event customer, said communication including an order to obtain admittance to at least one entertainment event, said communication also including an  
10 identifier associated with an identification device;

updating an account associated with said identifier to reflect said order;

accessing said account by utilizing said identifier stored on said identification device at a point of sale system upon presentation of said identification device to verify said order; and

admitting said event customer at said point of sale system after verification of said order.

2. A method for purchasing and provisioning admittance to entertainment events including at  
20 least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof to an event customer via a data communication network, said method comprising:

receiving a communication from said event customer, said communication including an order to obtain admittance to at least one entertainment event;

transmitting an identifier associated with an account to said event customer for storage on an identification device;

30 updating said account to reflect said order;

accessing said account at a point of sale system upon presentation of said identification device by utilizing said identifier stored in said identification device to verify said order; and

admitting said event customer at said point of sale system after verification of said order.

3. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:
- receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device;
- updating an account associated with said identifier to reflect said purchase;
- 10 accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and
- provisioning said item at said point of sale server after verification of said purchase.
4. The method of claim 3, wherein said communication includes payment information.
5. The method of claim 3, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.
6. The method of claim 3, wherein said step of accessing further comprises reading said identifier from said identification device with a reading device.
- 20 7. The method of claim 3, wherein said identification device comprises a memory medium for storing said identifier.
8. The method of claim 3, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.
9. The method of claim 3, wherein said account includes a list of purchased items.
10. The method of claim 3, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
11. The method of claim 3, further comprising transmitting advertisements to said client.
12. The method of claim 3, further comprising transmitting advertisements to said client via an electronic mail message.

13. The method of claim 3, further comprising receiving demographic information from said client.
14. The method of claim 3, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
15. The method of claim 3, wherein said server is connected to said point of sale server via another data communication network.
16. The method of claim 15, wherein said data communication networks comprise hardwired or wireless networks.
- 10 17. The method of claim 3, wherein said point of sale server and said server comprise a single computing node.
18. The method of claim 3, further comprising printing a physical receipt with said identification device or with said point of sale server.
19. The method of claim 18, wherein said physical receipt includes reserved seating and/or other purchase information.
20. The method of claim 3, wherein said identification device and said client comprise a single communication device.
21. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:
- 20 receiving a communication at said server from said client, said communication including an order for a purchase of said item;
- transmitting an identifier associated with an account from said server to said client for storage on an identification device;
- updating said account to reflect said purchase;
- accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and

provisioning said item at said point of sale server after verification of said purchase.

22. The method of claim 21, further comprising storing said identifier on said identification device.
23. The method of claim 21, wherein said identifier is a bar code written onto a ticket.
24. The method of claim 21, wherein said communication includes payment information.
25. The method of claim 21, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.
- 10 26. The method of claim 21, wherein said step of accessing further comprises reading said identifier from said identification device with a reading device.
27. The method of claim 21, wherein said identification device comprises a memory medium for storing said identifier.
28. The method of claim 21, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.
29. The method of claim 21, wherein said account includes a list of purchased items.
30. The method of claim 21, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
31. The method of claim 21, further comprising transmitting advertisements to said client.
- 20 32. The method of claim 21, further comprising transmitting advertisements to said client via an electronic mail message.
33. The method of claim 21, further comprising receiving demographic information from said client.
34. The method of claim 21, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.

35. The method of claim 21, wherein said server is connected to said point of sale server via another data communication network.
36. The method of claim 35, wherein said data communication networks comprise hardwired or wireless networks.
37. The method of claim 21, wherein said point of sale server and said server comprise a single computing node.
38. The method of claim 21, further comprising printing a physical receipt with said identification device or with said point of sale server.
39. The method of claim 38, wherein said physical receipt includes reserved seating and/or other purchase information.
40. The method of claim 21, wherein said identification device and said client comprise a single communication device.
41. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:
- transmitting a communication from said client to said server, said communication including an order for a purchase of said item and causing an account to be updated corresponding to said purchase, said purchase and said account being associated with an identifier stored on an identification device, said account being accessible upon presentation of said identification device for verifying and provisioning said item.
42. The method of claim 41, further comprising receiving said identifier from said server and storing said identifier on said identification device.
43. The method of claim 41, wherein said client and said identification device comprise a single computing node.
44. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:
- transmitting an order for a purchase of said item from said client to said server;

associating an identifier with said purchase order and with an identification device in the possession of or to be transferred to a user;

updating an account associated with said identifier to include said purchase;

accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and

provisioning said item at said point of sale server after verification of said purchase order.

10

45. A method for provisioning a purchase utilizing a data communication network, said method comprising:

receiving a communication from a user including a purchase order request, wherein said user is associated with an identifier;

updating an account associated with said identifier to reflect said purchase order request; and

provisioning said purchase upon presentation of said identifier.

20

46. A system used in purchasing and provisioning an item, comprising:

a server comprising a processor and a memory medium, said server connected to one or more clients via a data communication network, said memory medium containing instructions for controlling said processor, and wherein said processor is capable of:

receiving a communication from said one or more clients, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device,

updating an account associated with said identifier to reflect said purchase;

30

accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and

provisioning said item at said point of sale server after verification of said purchase.

47. The system of claim 46, wherein said communication includes payment information.
48. The system of claim 46, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.
49. The system of claim 46, wherein said accessing further comprises reading said identifier from said identification device with a reading device.
50. The system of claim 46, wherein said identification device comprises a memory medium for storing said identifier.
51. The system of claim 46, wherein said account is stored in at least one of said server, said  
10 identification device, and said point of sale server.
52. The system of claim 46, wherein said account includes a list of purchased items.
53. The system of claim 46, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
54. The system of claim 46, wherein said processor is further capable of transmitting advertisements to said one or more clients.
55. The system of claim 46, wherein said processor is further capable of transmitting advertisements to said one or more clients via electronic mail messages.
56. The system of claim 46, wherein said processor is further capable of receiving demographic information from said one or more clients.
- 20 57. The system of claim 46, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
58. The system of claim 46, wherein said server is connected to said point of sale server via another data communication network.
59. The system of claim 58, wherein said data communication networks comprise hardwired or wireless networks.

60. The system of claim 46, wherein said point of sale server and said server comprise a single computing node.
61. The system of claim 46, wherein said identification device and/or said point of sale server is capable of printing a physical receipt.
62. The system of claim 61, wherein said physical receipt includes reserved seating and/or other purchase information.
63. The system of claim 46, wherein said identification device comprises one of said one or more clients.
64. A system used in purchasing and provisioning an item, comprising:
- 10 a server comprising a processor and a memory medium, said server connected to one or more clients via a data communication network, said memory medium containing instructions for controlling said processor, and wherein said processor is capable of:
- receiving a communication at said server from said one or more clients, said communication including an order for a purchase of said item;
- transmitting an identifier associated with an account from said server to said one or more clients for storage on an identification device;
- updating said account to reflect said purchase;
- accessing said account at a point of sale server upon presentation of said identification device
- 20 by utilizing said identifier to verify said purchase; and
- provisioning said item at said point of sale server after verification of said purchase.
65. The system of claim 64, wherein said one or more clients are capable of storing said identifier on said identification device.
66. The system of claim 64, wherein said identifier is a bar code written onto a ticket.
67. The system of claim 64, wherein said communication includes payment information.
68. The system of claim 64, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.



69. The system of claim 64, wherein said accessing further comprises reading said identifier from said identification device with a reading device.
70. The system of claim 64, wherein said identification device comprises a memory medium for storing said identifier.
71. The system of claim 64, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.
72. The system of claim 64, wherein said account includes a list of purchased items.
73. The system of claim 64, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
- 10 74. The system of claim 64, further comprising instructions to effect transmitting advertisements to said one or more clients.
75. The system of claim 64, further comprising instructions to effect transmitting advertisements to said one or more clients via electronic mail messages.
76. The system of claim 64, further comprising instructions to effect receiving demographic information from said one or more clients.
77. The system of claim 64, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
- 20 78. The system of claim 64, wherein said server is connected to said point of sale server via another data communication network.
79. The system of claim 78, wherein said data communication networks comprise hardwired or wireless networks.
80. The system of claim 64, wherein said point of sale server and said server comprise a single computing node.
81. The system of claim 64, wherein said identification device or said point of sale server is capable of printing a physical receipt.

82. The system of claim 81, wherein said physical receipt includes reserved seating and/or other purchase information.
83. The system of claim 64, wherein said identification device comprises one of said one or more clients.
84. A system for use in provisioning a purchase, said system comprising:
- a server comprising a processor and a memory medium, said server connected to a data communication network, said memory medium containing instructions for controlling said processor, wherein said processor is capable of:
- receiving a communication from a user including a purchase order request, wherein said user
- 10 is associated with an identifier;
- updating an account associated with said identifier to reflect said purchase order; and
- provisioning said purchase upon presentation of said identifier.
85. A computer program product, comprising:
- a memory medium;
- a computer program stored on said memory medium for use in purchasing and provisioning an item utilizing a server and a client connected to said server via a data communication network, said computer program containing instructions for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also
- 20 including an identifier associated with an identification device; updating an account associated with said identifier to reflect said purchase; accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and provisioning said item at said point of sale server after verification of said purchase.
86. The computer program product of claim 85, wherein said communication includes payment information.
87. The computer program product of claim 85, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.
- 30 88. The computer program product of claim 85, wherein said accessing further comprises reading said identifier from said identification device with a reading device.

89. The computer program product of claim 85, wherein said identification device comprises a memory medium for storing said identifier.
90. The computer program product of claim 85, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.
91. The computer program product of claim 85, wherein said account includes a list of purchased items.
92. The computer program product of claim 85, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
93. The computer program product of claim 85, further comprising instructions for transmitting  
10 advertisements to said client.
94. The computer program product of claim 85, further comprising instructions for transmitting advertisements to said client via an electronic mail message.
95. The computer program product of claim 85, further comprising instructions for receiving demographic information from said client.
96. The computer program product of claim 85, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
97. The computer program product of claim 85, wherein said server is connected to said point of sale server via another data communication network.
- 20 98. The computer program product of claim 97, wherein said data communication networks comprise hardwired or wireless networks.
99. The computer program product of claim 85, wherein said point of sale server and said server comprise a single computing node.
100. The computer program product of claim 85, further comprising instructions for printing a physical receipt with said identification device or with said point of sale server.
101. The computer program product of claim 100, wherein said physical receipt includes reserved seating and/or other purchase information.

102. The computer program product of claim 85, wherein said identification device and said client comprise a single communication device.

103. A computer program product, comprising:

a memory medium;

10 a computer program stored on said memory medium for use in purchasing and provisioning an item utilizing a server and a client connected to said server via a data communication network, said computer program containing instructions for receiving a communication at a server from a client via a data communication network, said communication including an order for a purchase of said item; transmitting an identifier associated with an account from said server to said client for storage on an identification device; updating said account to reflect said purchase; accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and provisioning said item at said point of sale server after verification of said purchase.

104. The computer program product of claim 103, further comprising instructions for storing said identifier on said identification device.

105. The computer program product of claim 103, wherein said identifier is a bar code written onto a ticket.

106. The computer program product of claim 103, wherein said communication includes payment information.

20 107. The computer program product of claim 103, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.

108. The computer program product of claim 103, wherein said accessing further comprises reading said identifier from said identification device with a reading device.

109. The computer program product of claim 103, wherein said identification device comprises a memory medium for storing said identifier.

110. The computer program product of claim 103, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.

111. The computer program product of claim 103, wherein said account includes a list of purchased items.
112. The computer program product of claim 103, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
113. The computer program product of claim 103, further comprising instructions for transmitting advertisements to said client.
114. The computer program product of claim 103, further comprising instructions for transmitting advertisements to said client via an electronic mail message.
115. The computer program product of claim 103, further comprising instructions for receiving  
10 demographic information from said client.
116. The computer program product of claim 103, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
117. The computer program product of claim 103, wherein said server is connected to said point of sale server via another data communication network.
118. The computer program product of claim 117, wherein said data communication networks comprise hardwired or wireless networks.
119. The computer program product of claim 103, wherein said point of sale server and said server comprise a single computing node.
- 20 120. The computer program product of claim 103, further comprising instructions for printing a physical receipt with said identification device or with said point of sale server.
121. The computer program product of claim 120, wherein said physical receipt includes reserved seating and/or other purchase information.
122. The computer program product of claim 103, wherein said identification device and said client comprise a single communication device.
123. A computer program product, comprising:  
  
a memory medium;

a computer program stored on said memory medium for use in provisioning a purchase utilizing a data communication network, said computer program product containing instructions for receiving a communication from a user including a purchase order request, wherein said user is associated with an identifier; updating an account associated with said identifier to reflect said purchase order; and provisioning said purchase upon presentation of said identifier.

124. An identification device for use in provisioning an item, comprising:

10 a main body including a memory medium, said memory medium having stored therein or capable of receiving an identifier useable for accessing an account for confirming the purchase of an item, said account being associated with said identifier and being updateable to reflect purchases.

125. The identification device of claim 124, wherein said identification comprises a wireless phone, a smart card, a credit card, a ticket, a personal digital assistant, an Internet-ready watch, or other similar device.

126. A system for use in purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said system comprising:

20 means for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device;  
means for updating an account associated with said identifier to reflect said purchase;  
means for accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and  
means for provisioning said item at said point of sale server after verification of said purchase.

127. A system for use in purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said system comprising:

30 means for receiving a communication at said server from said client, said communication including an order for a purchase of said item;  
means for transmitting an identifier associated with an account from said server to said client for storage on an identification device;  
means for updating said account to reflect said purchase;

means for accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and

means for provisioning said item at said point of sale server after verification of said purchase.

128. A system for use in provisioning a purchase utilizing a data communication network, said system comprising:

means for receiving a communication from a user including a purchase order request, wherein said user is associated with an identifier;

10 means for updating an account associated with said identifier to reflect said purchase order; and

means for provisioning said purchase upon presentation of said identifier.

129. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:

a step for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device;

a step for updating an account associated with said identifier to reflect said purchase;

20 a step for accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and

a step for provisioning said item at said point of sale server after verification of said purchase.

130. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:

a step for receiving a communication at said server from said client, said communication including an order for a purchase of said item;

a step for transmitting an identifier associated with an account from said server to said client for storage on an identification device;

30 a step for updating said account to reflect said purchase;

a step for accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and

a step for provisioning said item at said point of sale server after verification of said purchase.

131. A method for provisioning a purchase utilizing a data communication network, said method comprising:

a step for receiving a communication from a user including a purchase order request, wherein said user is associated with an identifier;

a step for updating an account associated with said identifier to reflect said purchase order;

and

a step for provisioning said purchase upon presentation of said identifier.



71  
**AMENDED CLAIMS**

[received by the International Bureau on 21 November 2000 (21.11.00);  
original claims 1- 131 replaced by new claims 1 – 136 (20 pages)]

1. A method for purchasing and provisioning admittance to entertainment events via a point of sale system, the entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof, to an event customer via a data communication network without the event user customer having to appear in person at a point of sale location, said method comprising:

receiving a communication transmitted from a computing device in the possession of or located near said event customer and not located in a fixed location near the point of sale location, said communication including an order to obtain admittance to at least one entertainment event, said communication also including an identifier associated with an identification device and corresponding to the event customer;

processing the order and updating an account having account information including identification and contact information of the event customer associated with said identifier to reflect said order without having to send a physical ticket or confirmation to the event customer, wherein the account information is not stored on said identification device, and updating the point of sale system located at the entertainment event to reflect the order;

accessing said account by utilizing said identifier stored on said identification device at the point of sale system located at the entertainment event upon presentation of said identification device to verify said order; and

admitting said event customer at said point of sale system after verification of said order.

2. A method for purchasing and provisioning admittance to entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof to an event customer via a data communication network without the event customer having to appear in person at a point of sale location, said method comprising:

receiving a communication transmitted from a computing device in the possession of said event customer and not from a fixed location near the point of sale location, said communication including an order to obtain admittance to at least one entertainment event;

transmitting an identifier associated with an account to said event customer for storage on an identification device;

updating said account to reflect said order without having to send a physical ticket or confirmation, wherein said account is not stored on said identification device;

accessing said account at a point of sale system upon presentation of said identification device by utilizing said identifier stored in said identification device to verify said order; and

admitting said event customer at said point of sale system after verification of said order.

3. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:

receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device, said client being in the possession of a consumer;

updating an account associated with said identifier to reflect said purchase, wherein said account is not stored on said identification device;

accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and

provisioning said item at said point of sale server after verification of said purchase.

4. The method of claim 3, wherein said communication includes payment information.

5. The method of claim 3, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.

6. The method of claim 3, wherein said step of accessing further comprises reading said identifier from said identification device with a reading device.

7. The method of claim 3, wherein said identification device comprises a memory medium for storing said identifier.

8. The method of claim 3, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.

9. The method of claim 3, wherein said account includes a list of purchased items.
10. The method of claim 3, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
11. The method of claim 3, further comprising transmitting advertisements to said client.
12. The method of claim 3, further comprising transmitting advertisements to said client via an electronic mail message.
13. The method of claim 3, further comprising receiving demographic information from said client.
14. The method of claim 3, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
15. The method of claim 3, wherein said server is connected to said point of sale server via another data communication network.
16. The method of claim 15, wherein said data communication networks comprise hardwired or wireless networks.
17. The method of claim 3, wherein said point of sale server and said server comprise a single computing node.
18. The method of claim 3, further comprising printing a physical receipt with said identification device or with said point of sale server.
19. The method of claim 18, wherein said physical receipt includes reserved seating and/or other purchase information.
20. The method of claim 3, wherein said identification device and said client comprise a single communication device.

21. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:

receiving a communication at said server from said client, said communication including an order for a purchase of said item, said client being in the possession of a consumer;

transmitting an identifier associated with an account from said server to said client for storage on an identification device, wherein said account is not stored on said identification device;

updating said account to reflect said purchase;

accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and

provisioning said item at said point of sale server after verification of said purchase.

22. The method of claim 21, further comprising storing said identifier on said identification device.

23. The method of claim 21, wherein said identifier is a bar code written onto a ticket.

24. The method of claim 21, wherein said communication includes payment information.

25. The method of claim 21, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.

26. The method of claim 21, wherein said step of accessing further comprises reading said identifier from said identification device with a reading device.

27. The method of claim 21, wherein said identification device comprises a memory medium for storing said identifier.

28. The method of claim 21, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.

29. The method of claim 21, wherein said account includes a list of purchased items.
30. The method of claim 21, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
31. The method of claim 21, further comprising transmitting advertisements to said client.
32. The method of claim 21, further comprising transmitting advertisements to said client via an electronic mail message.
33. The method of claim 21, further comprising receiving demographic information from said client.
34. The method of claim 21, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
35. The method of claim 21, wherein said server is connected to said point of sale server via another data communication network.
36. The method of claim 35, wherein said data communication networks comprise hardwired or wireless networks.
37. The method of claim 21, wherein said point of sale server and said server comprise a single computing node.
38. The method of claim 21, further comprising printing a physical receipt with said identification device or with said point of sale server.
39. The method of claim 38, wherein said physical receipt includes reserved seating and/or other purchase information.

40. The method of claim 21, wherein said identification device and said client comprise a single communication device.
41. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:
- transmitting a communication from said client to said server, said client being in the possession of a consumer, said communication including an order for a purchase of said item and causing an account to be updated corresponding to said purchase without having to send a physical ticket or confirmation, said purchase and said account being associated with an identifier, said identifier being stored on an identification device, said account being accessible upon presentation of said identification device for verifying and provisioning said item, and wherein said account is not stored on said identification device.
42. The method of claim 41, further comprising receiving said identifier from said server and storing said identifier on said identification device.
43. The method of claim 41, wherein said client and said identification device comprise a single computing node.
44. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:
- transmitting an order for a purchase of said item from said client to said server, said client being in the possession of a user, and said transmitting occurring without the user having to appear in person at a point of sale location;
  - associating an identifier with said purchase order and with an identification device in the possession of or to be transferred to said user;
  - updating an account associated with said identifier to include said purchase without having to send a physical ticket or confirmation, wherein said account is not stored on said identification device;
  - accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and
  - provisioning said item at said point of sale server after verification of said purchase order.

45. A method for provisioning a purchase utilizing a data communication network, said method comprising:
- receiving a communication from a computing device in the possession of a user including a purchase order request, wherein said user is associated with an identifier;
  - updating an account associated with said identifier to reflect said purchase order request, wherein said account is not stored on said identification device; and
  - provisioning said purchase upon presentation of said identifier.
46. A system used in purchasing and provisioning an item, comprising:
- a server comprising a processor and a memory medium, said server connected to one or more clients via a data communication network, said memory medium containing instructions for controlling said processor, and wherein said processor is capable of:
    - receiving a communication from said one or more clients, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device, said client being in the possession of a consumer;
    - updating an account associated with said identifier to reflect said purchase, wherein said account is not stored on said identification device;
    - accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and
    - provisioning said item at said point of sale server after verification of said purchase.
47. The system of claim 46, wherein said communication includes payment information.
48. The system of claim 46, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.
49. The system of claim 46, wherein said accessing further comprises reading said identifier from said identification device with a reading device.
50. The system of claim 46, wherein said identification device comprises a memory medium for storing said identifier.

51. The system of claim 46, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.
52. The system of claim 46, wherein said account includes a list of purchased items.
53. The system of claim 46, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
54. The system of claim 46, wherein said processor is further capable of transmitting advertisements to said one or more clients.
55. The system of claim 46, wherein said processor is further capable of transmitting advertisements to said one or more clients via electronic mail messages.
56. The system of claim 46, wherein said processor is further capable of receiving demographic information from said one or more clients.
57. The system of claim 46, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
58. The system of claim 46, wherein said server is connected to said point of sale server via another data communication network.
59. The system of claim 58, wherein said data communication networks comprise hardwired or wireless networks.
60. The system of claim 46, wherein said point of sale server and said server comprise a single computing node.
61. The system of claim 46, wherein said identification device and/or said point of sale server is capable of printing a physical receipt.



62. The system of claim 61, wherein said physical receipt includes reserved seating and/or other purchase information.
63. The system of claim 46, wherein said identification device comprises one of said one or more clients.
64. A system used in purchasing and provisioning an item, comprising:  
a server comprising a processor and a memory medium, said server connected to one or more clients via a data communication network, said memory medium containing instructions for controlling said processor, and wherein said processor is capable of:  
receiving a communication at said server from said one or more clients, said communication including an order for a purchase of said item, said client being in the possession of a consumer;  
transmitting an identifier associated with an account from said server to said one or more clients for storage on an identification device, wherein said account is not stored on said identification device;  
updating said account to reflect said purchase;  
accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and  
provisioning said item at said point of sale server after verification of said purchase.
65. The system of claim 64, wherein said one or more clients are capable of storing said identifier on said identification device.
66. The system of claim 64, wherein said identifier is a bar code written onto a ticket.
67. The system of claim 64, wherein said communication includes payment information.
68. The system of claim 64, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.
69. The system of claim 64, wherein said accessing further comprises reading said identifier from said identification device with a reading device.

70. The system of claim 64, wherein said identification device comprises a memory medium for storing said identifier.
71. The system of claim 64, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.
72. The system of claim 64, wherein said account includes a list of purchased items.
73. The system of claim 64, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
74. The system of claim 64, further comprising instructions to effect transmitting advertisements to said one or more clients.
75. The system of claim 64, further comprising instructions to effect transmitting advertisements to said one or more clients via electronic mail messages.
76. The system of claim 64, further comprising instructions to effect receiving demographic information from said one or more clients.
77. The system of claim 64, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
78. The system of claim 64, wherein said server is connected to said point of sale server via another data communication network.
79. The system of claim 78, wherein said data communication networks comprise hardwired or wireless networks.
80. The system of claim 64, wherein said point of sale server and said server comprise a single computing node.

81. The system of claim 64, wherein said identification device or said point of sale server is capable of printing a physical receipt.

82. The system of claim 81, wherein said physical receipt includes reserved seating and/or other purchase information.

83. The system of claim 64, wherein said identification device comprises one of said one or more clients.

84. A system for use in provisioning a purchase, said system comprising:

a server comprising a processor and a memory medium, said server connected to a data communication network, said memory medium containing instructions for controlling said processor, wherein said processor is capable of:

receiving a communication from a computing device in the possession of a user including a purchase order request, wherein said user is associated with an identifier;

updating an account associated with said identifier to reflect said purchase order request, wherein said account is not stored on said identification device; and provisioning said purchase upon presentation of said identifier.

85. A computer program product, comprising:

a memory medium;

a computer program stored on said memory medium for use in purchasing and provisioning an item utilizing a server and a client connected to said server via a data communication network, said computer program containing instructions for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device, said client being in the possession of a consumer; updating an account associated with said identifier to reflect said purchase, wherein said account is not stored on said identification device; accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and provisioning said item at said point of sale server after verification of said purchase.

86. The computer program product of claim 85, wherein said communication includes payment information.

87. The computer program product of claim 85, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.
88. The computer program product of claim 85, wherein said accessing further comprises reading said identifier from said identification device with a reading device.
89. The computer program product of claim 85, wherein said identification device comprises a memory medium for storing said identifier.
90. The computer program product of claim 85, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.
91. The computer program product of claim 85, wherein said account includes a list of purchased items.
92. The computer program product of claim 85, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.
93. The computer program product of claim 85, further comprising instructions for transmitting advertisements to said client.
94. The computer program product of claim 85, further comprising instructions for transmitting advertisements to said client via an electronic mail message.
95. The computer program product of claim 85, further comprising instructions for receiving demographic information from said client.
96. The computer program product of claim 85, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.
97. The computer program product of claim 85, wherein said server is connected to said point of sale server via another data communication network.

98. The computer program product of claim 97, wherein said data communication networks comprise hardwired or wireless networks.
99. The computer program product of claim 85, wherein said point of sale server and said server comprise a single computing node.
100. The computer program product of claim 85, further comprising instructions for printing a physical receipt with said identification device or with said point of sale server.
101. The computer program product of claim 100, wherein said physical receipt includes reserved seating and/or other purchase information.
102. The computer program product of claim 85, wherein said identification device and said client comprise a single communication device.
103. A computer program product, comprising:  
a memory medium;  
a computer program stored on said memory medium for use in purchasing and provisioning an item utilizing a server and a client connected to said server via a data communication network, said computer program containing instructions for receiving a communication at a server from a client via a data communication network, said communication including an order for a purchase of said item, said client being in the possession of a consumer; transmitting an identifier associated with an account from said server to said client for storage on an identification device, wherein said account is not stored on said identification device; updating said account to reflect said purchase; accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and provisioning said item at said point of sale server after verification of said purchase.
104. The computer program product of claim 103, further comprising instructions for storing said identifier on said identification device.
105. The computer program product of claim 103, wherein said identifier is a bar code written onto a ticket.

106. The computer program product of claim 103, wherein said communication includes payment information.

107. The computer program product of claim 103, wherein said communication includes at least one of a movie or event selection, a venue selection, a concession selection, and/or a merchandise selection.

108. The computer program product of claim 103, wherein said accessing further comprises reading said identifier from said identification device with a reading device.

109. The computer program product of claim 103, wherein said identification device comprises a memory medium for storing said identifier.

110. The computer program product of claim 103, wherein said account is stored in at least one of said server, said identification device, and said point of sale server.

111. The computer program product of claim 103, wherein said account includes a list of purchased items.

112. The computer program product of claim 103, wherein said item comprises at least one of a movie ticket, a sporting event ticket, a concession, or merchandise.

113. The computer program product of claim 103, further comprising instructions for transmitting advertisements to said client.

114. The computer program product of claim 103, further comprising instructions for transmitting advertisements to said client via an electronic mail message.

115. The computer program product of claim 103, further comprising instructions for receiving demographic information from said client.

116. The computer program product of claim 103, wherein said identification device comprises at least one of a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, or other similar portable and/or wireless device.

117. The computer program product of claim 103, wherein said server is connected to said point of sale server via another data communication network.

118. The computer program product of claim 117, wherein said data communication networks comprise hardwired or wireless networks.

119. The computer program product of claim 103, wherein said point of sale server and said server comprise a single computing node.

120. The computer program product of claim 103, further comprising instructions for printing a physical receipt with said identification device or with said point of sale server.

121. The computer program product of claim 120, wherein said physical receipt includes reserved seating and/or other purchase information.

122. The computer program product of claim 103, wherein said identification device and said client comprise a single communication device.

123. A computer program product, comprising:  
a memory medium;  
a computer program stored on said memory medium for use in provisioning a purchase utilizing a data communication network, said computer program product containing instructions for receiving a communication from a computing device in the possession of a user including a purchase order request, wherein said user is associated with an identifier; updating an account associated with said identifier to reflect said purchase order request, wherein said account is not stored on said identification device; and provisioning said purchase upon presentation of said identifier.

124. An identification device for use in provisioning an item, comprising:  
a main body including a memory medium, said memory medium having stored therein or capable of receiving an identifier useable for accessing an account for confirming the purchase of an item, wherein said identifier is transmitted in response to a request made by a user to purchase the item from a computing device in the possession of the user, said account being associated with said identifier and being updateable to reflect purchases, wherein said account is not stored on said identification device.

125. The identification device of claim 124, wherein said identification comprises a wireless phone, a smart card, a credit card, a ticket, a personal digital assistant, an Internet-ready watch, or other similar device.

126. A system for use in purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said system comprising:

means for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device, said client being in the possession of a consumer;

means for updating an account associated with said identifier to reflect said purchase, wherein said account is not stored on said identification device;

means for accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and

means for provisioning said item at said point of sale server after verification of said purchase.

127. A system for use in purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said system comprising:

means for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said client being in the possession of a consumer;

means for transmitting an identifier associated with an account from said server to said client for storage on an identification device, wherein said account is not stored on said identification device;

means for updating said account to reflect said purchase;

means for accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and

means for provisioning said item at said point of sale server after verification of said purchase.



128. A system for use in provisioning a purchase utilizing a data communication network, said system comprising:

means for receiving a communication from a computing device in the possession of a user including a purchase order request, wherein said user is associated with an identifier;

means for updating an account associated with said identifier to reflect said purchase order request, wherein said account is not stored on said identification device; and

means for provisioning said purchase upon presentation of said identifier.

129. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:

a step for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device, said client being in the possession of a consumer;

a step for updating an account associated with said identifier to reflect said purchase, wherein said account is not stored on said identification device;

a step for accessing said account by utilizing said identifier at a point of sale server upon presentation of said identification device to verify said purchase; and

a step for provisioning said item at said point of sale server after verification of said purchase.

130. A method for purchasing and provisioning an item utilizing a server linked to a client via a data communication network, said method comprising:

a step for receiving a communication at said server from said client, said communication including an order for a purchase of said item, said client being in the possession of a consumer;

a step for transmitting an identifier associated with an account from said server to said client for storage on an identification device, wherein said account is not stored on said identification device;

a step for updating said account to reflect said purchase;

a step for accessing said account at a point of sale server upon presentation of said identification device by utilizing said identifier to verify said purchase; and

a step for provisioning said item at said point of sale server after verification of said purchase.

131. A method for provisioning a purchase utilizing a data communication network, said method comprising:

- a step for receiving a communication from a computing device in the possession of a user including a purchase order request, wherein said user is associated with an identifier;

- a step for updating an account associated with said identifier to reflect said purchase order request, wherein said account is not stored on said identification device; and

- a step for provisioning said purchase upon presentation of said identifier.

132. A method for purchasing and provisioning admittance to entertainment events via a point of sale system, the entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof, to an event customer via a data communication network without the event user customer having to appear in person at a point of sale location, said method comprising:

- receiving a communication transmitted from a portable wireless device in the possession of or located near said event customer, said communication including an order to obtain admittance to at least one entertainment event, said communication also including an identifier associated with said wireless device and corresponding to the event customer;

- processing the order and updating an account having account information including identification and contact information of the event customer associated with said identifier to reflect said order without having to send a physical ticket or confirmation to the event customer, wherein the account information is not stored on said portable wireless device, and updating the point of sale system located at the entertainment event to reflect the order;

- transmitting said identifier using said portable wireless device at the entertainment event to be admitted thereto;

- receiving said identifier and accessing said account by utilizing said identifier to access a corresponding account having the account information associated with the customer and stored in the point of said system upon presentation of said wireless device to verify said order; and

- admitting said event customer at the entertainment event after verification of said order.

133. A method for purchasing and provisioning an item utilizing a server capable of being linked to a wireless device via a data communication network, said method comprising:

receiving a communication at said server from said wireless device, said communication including an order for a purchase of said item, said communication also including an identifier associated with said wireless device, said wireless device being in the possession of a consumer;

updating an account associated with said identifier to reflect said purchase, wherein said account is not stored on said wireless device;

accessing said account by utilizing said identifier at a point of sale server upon transmission of said identifier from said wireless device to verify said purchase; and

provisioning said item at said point of sale server after verification of said purchase.

134. A method for purchasing and provisioning an item utilizing a server capable of being linked to a wireless device via a data communication network, said method comprising:

receiving a communication at said server from said wireless device, said communication including an order for a purchase of said item, said wireless device being in the possession of a consumer;

transmitting an identifier associated with an account from said server to said wireless device for storage thereon, wherein the account is not stored on said wireless device;

updating said account to reflect said purchase;

accessing said account at a point of sale server upon transmission of said identifier from said wireless device by utilizing said identifier to verify said purchase; and

provisioning said item at said point of sale server after verification of said purchase.

135. A method for provisioning a purchase utilizing a data communication network, said method comprising:

receiving a communication from a wireless device in the possession of a user including a purchase order request, wherein said user is associated with an identifier stored on said wireless device;

updating an account associated with said identifier to reflect said purchase order request, wherein said account is not stored on said wireless device; and

provisioning said purchase upon transmission of said identifier from said wireless device.

136. A system used in purchasing and provisioning an item, comprising:
- a server comprising a processor and a memory medium, said server connectable to one or more portable wireless devices via a data communication network, said memory medium containing instructions for controlling said processor, and wherein said processor is capable of:
    - receiving a communication from said one or more portable wireless devices, said communication including an order for a purchase of said item, said communication also including an identifier associated with an identification device, each portable wireless device being in the possession of a consumer,
    - updating an account associated with said identifier to reflect said purchase, wherein said account is not stored on said wireless devices;
    - accessing said account by utilizing said identifier at a point of sale server upon transmission of said identifier from said identification device to verify said purchase; and
    - provisioning said item at said point of sale server after verification of said purchase.

## STATEMENT UNDER ARTICLE 19 (1)

Applicant provides the following comments regarding the relevance of the references cited by the Examiner:

The present invention allows customers to make purchases over a data communication network, and receive the items or services without having to wait in line and without physical tickets. Specifically, a computing device in the possession of the customer is utilized to transmit an order. By utilizing a device in his possession, the customer need not wait in lines to complete the purchase. Examples of these devices include PCs, wireless devices/phones, and/or Bluetooth-enabled devices. After receiving the order, an account maintained in a main computing server is updated to reflect the purchase, and an identifier is stored onto an identification device such as a wireless phone, PDA or smart card.

To redeem a purchase, the customer presents this identification device at a point of sale location, where the identifier is read and used to access the customer's account. After accessing the account, purchase information may be verified before provisioning any purchases to the customer. In some embodiments, a wireless device may be used to request the purchase order as well as access the customer's account. In addition, no private purchase information is stored on the identification devices. Instead, only an identifier associated with the account is stored therein. By doing so, a lost device may be replaced without having to rewrite or store account information onto the replacement device.

Oneda relates to a system for transferring airline tickets from one user to another where the tickets may be purchased only from a public terminal. In Oneda, public terminals are used by the customer to purchase tickets (col. 6, lines 46-49). Thus, the user may be subject to a lengthy wait in line. After a ticket has been purchased, an automatic ticket machine issues an IC card to the user with ticket information stored thereon (col. 6, lines 59-64). This information includes the number of tickets purchased, seat class, and other similar data (col. 7, lines 7-10). As such, the purchases occur utilizing terminals that are not in the possession of the users. Because of this, there is a distinct possibility that these users will be subject to lengthy waits in line. Furthermore, ticket information relating to the purchase is stored on the IC card. Thus, replacing a lost or stolen card requires rewriting ticket information onto a new card or device.

Tagawa is directed to a system for selling travel-related services which utilizes paper tickets purchased and dispensed from a public kiosk. In Tagawa, public kiosks are used by consumers to purchase airline tickets and other items or services (col. 10, lines 31-36). To pay for the purchase, the consumer swipes a credit card in a scanner (col. 10, lines 6-7). Afterwards, a physical voucher dispensed from dispenser 38 (col. 10, lines 8-9) is used to redeem the purchase. Thus, Tagawa does not deal with paperless tickets and utilizes public kiosks 20 that are not in the possession of its users to facilitate its purchases. Hence, it is possible that these consumers will be subject to lengthy waits in line.

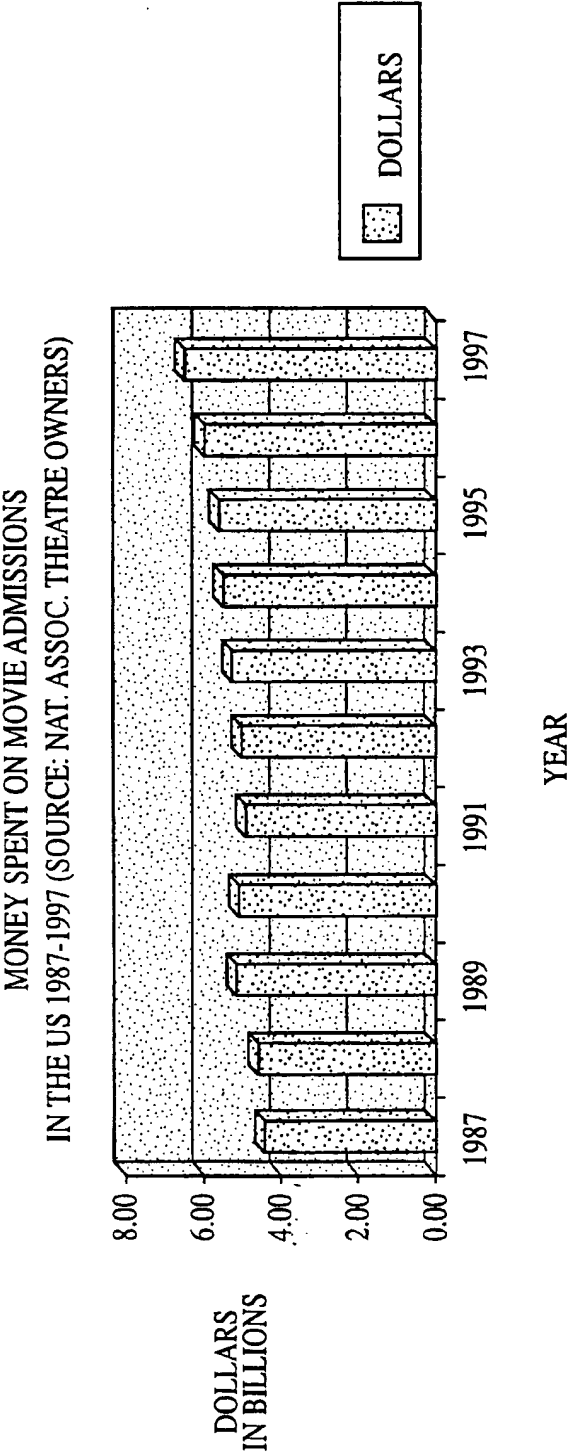


FIG. 1

2/33

ON AVERAGE, EACH US RESIDENT IS ATTENDING ONE  
MORE MOVIE EACH YEAR THAN THEY WERE IN THE  
BEGINNING OF THE DECADE (SOURCE: MOTION  
PICTURE ASSOC. AMERICA)

YEAR	ADMISSIONS PER CAPITA	YEARLY CHANGE	1998 VERSUS
1998	5.5	5.8%	--
1997	5.2	2.7%	5.8%
1996	5.0	5.1%	8.6%
1995	4.8	-3.2%	14.1%
1994	5.0	2.8%	10.5%
1993	4.8	4.9%	13.6%
1992	4.6	1.7%	19.2%
1991	4.5	-5.1%	21.2%
1990	4.8	--	15.1%
1985	4.4	--	23.5%
1980	4.5	--	22.0%

FIG. 2



3/33

SHARE OF AD COSTS BY MEDIA 1997,  
SOURCE NAT. ASSOC. THEATRE OWNERS

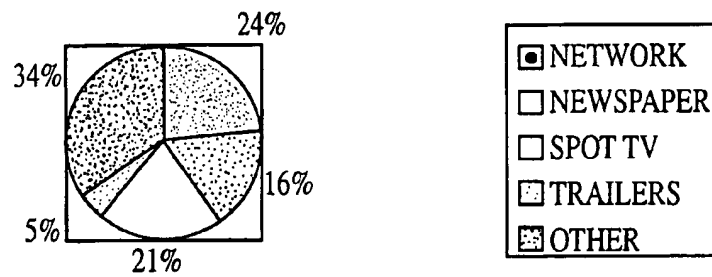


FIG. 3

4/33

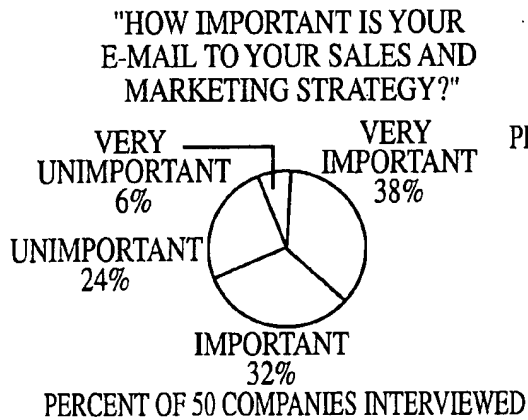


FIG. 4a

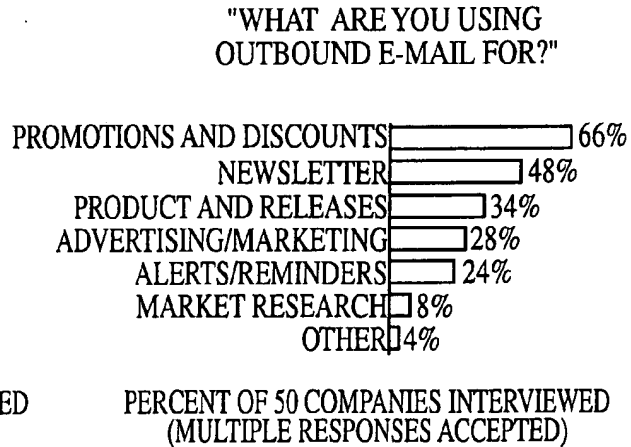


FIG. 4b

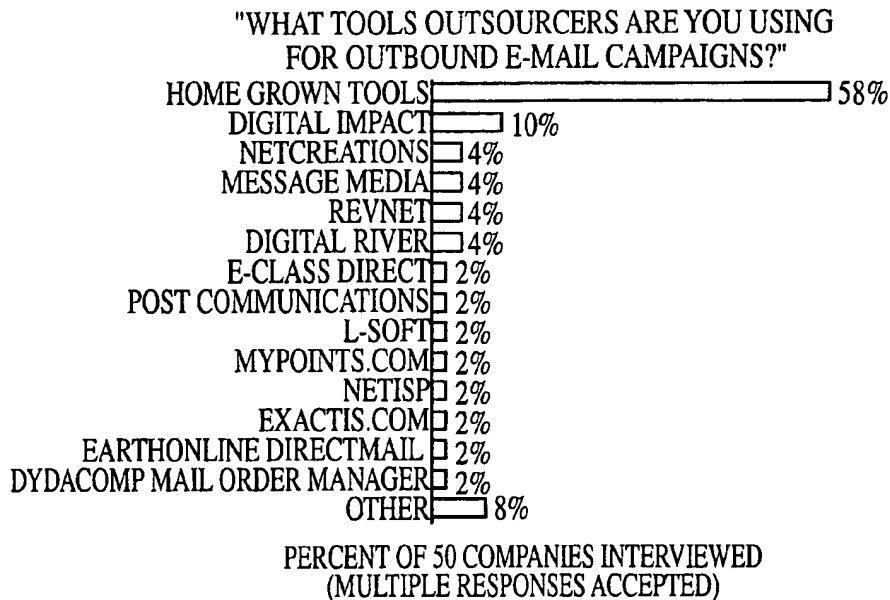


FIG. 4c

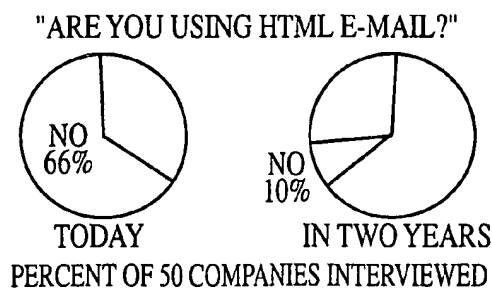


FIG. 4d  
AMENDED SHEET (ARTICLE 19)

SOURCE: FORRESTER RESEARCH, INC.

5/33

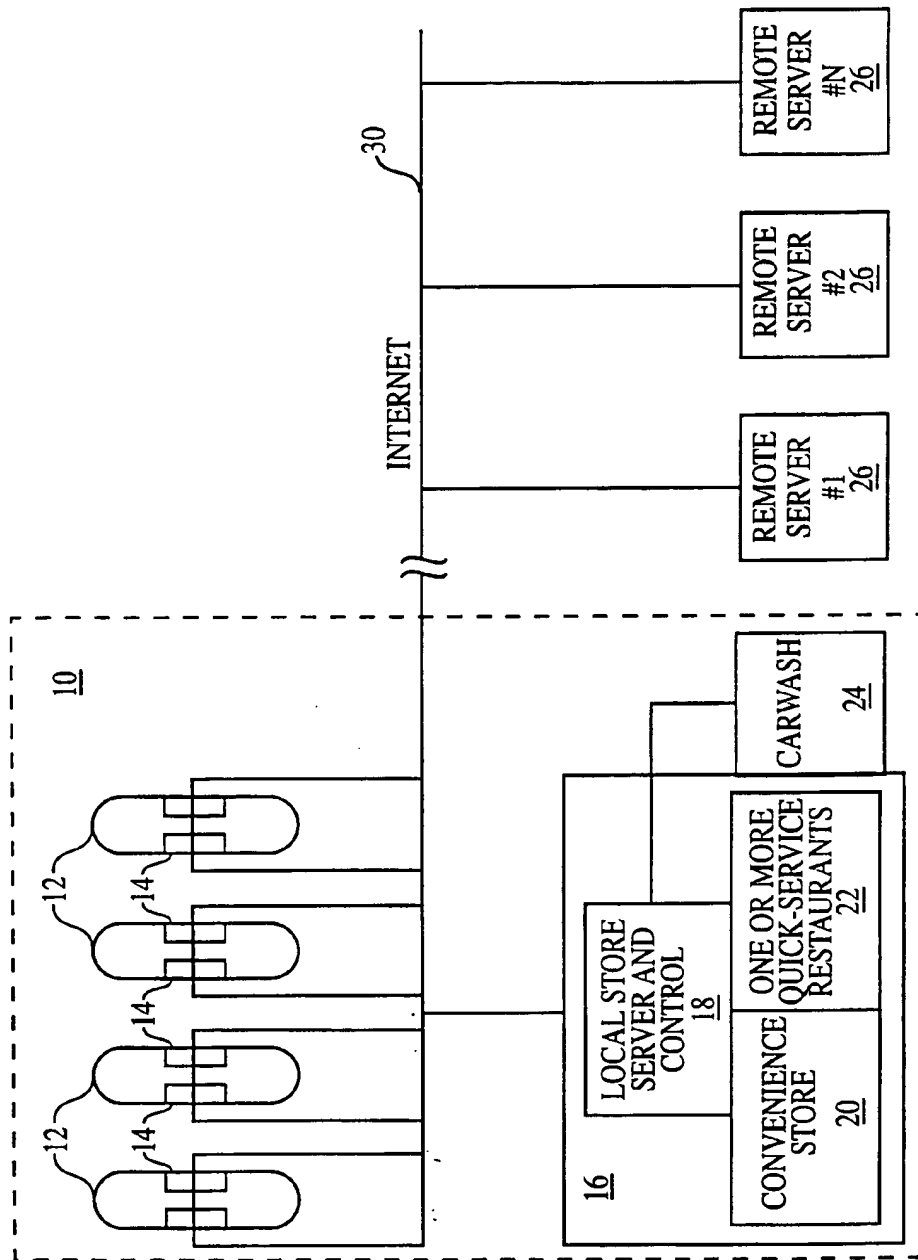
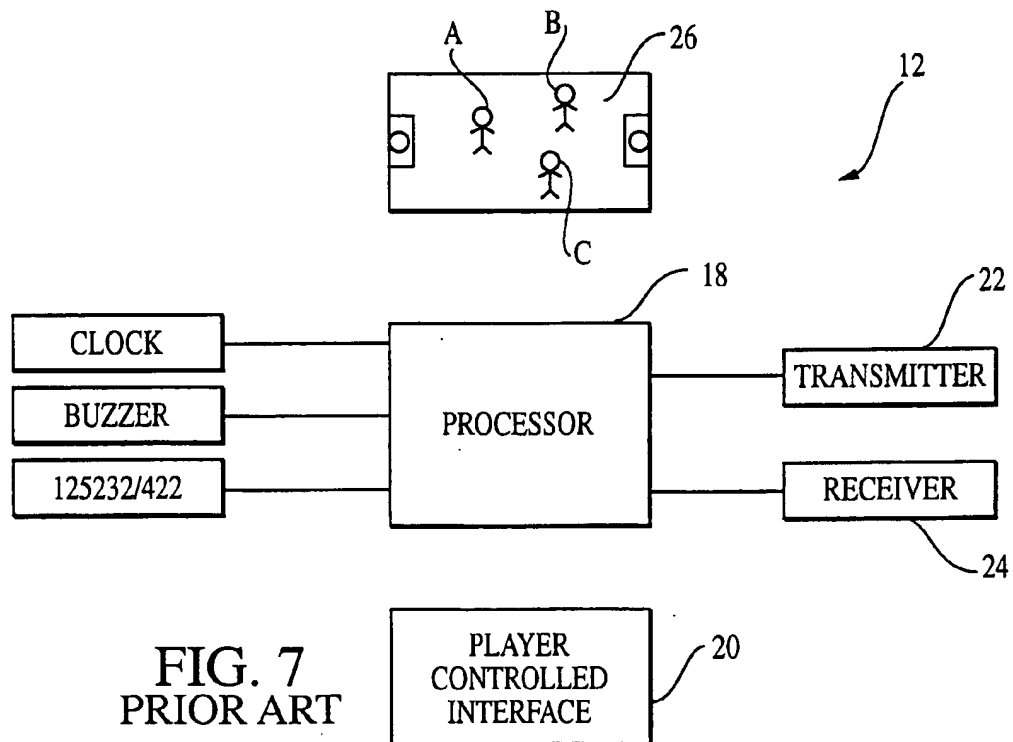
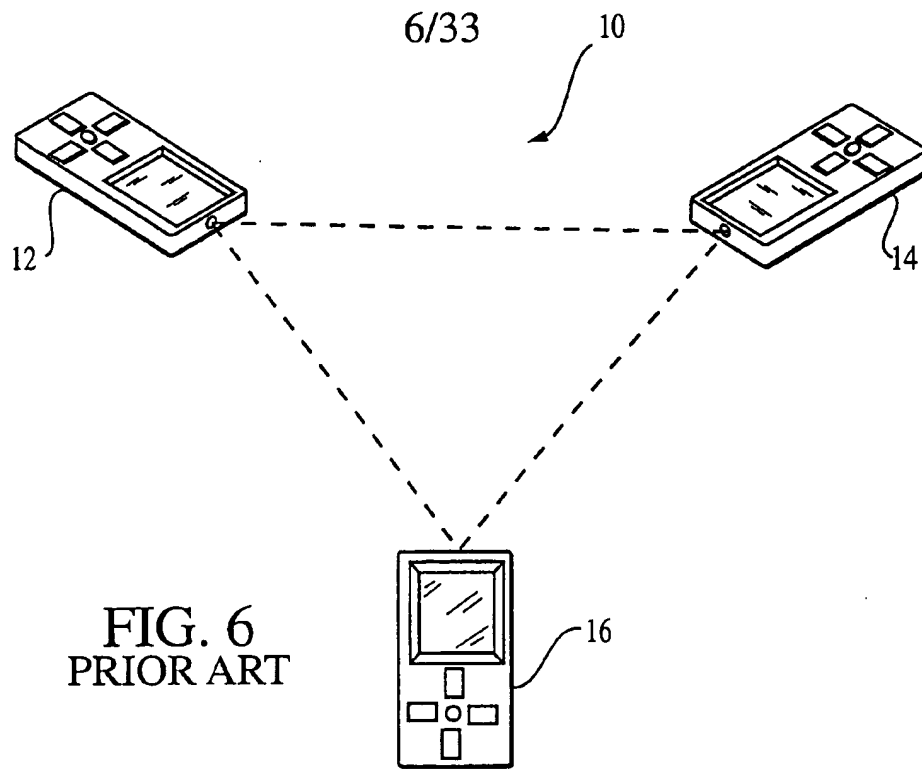
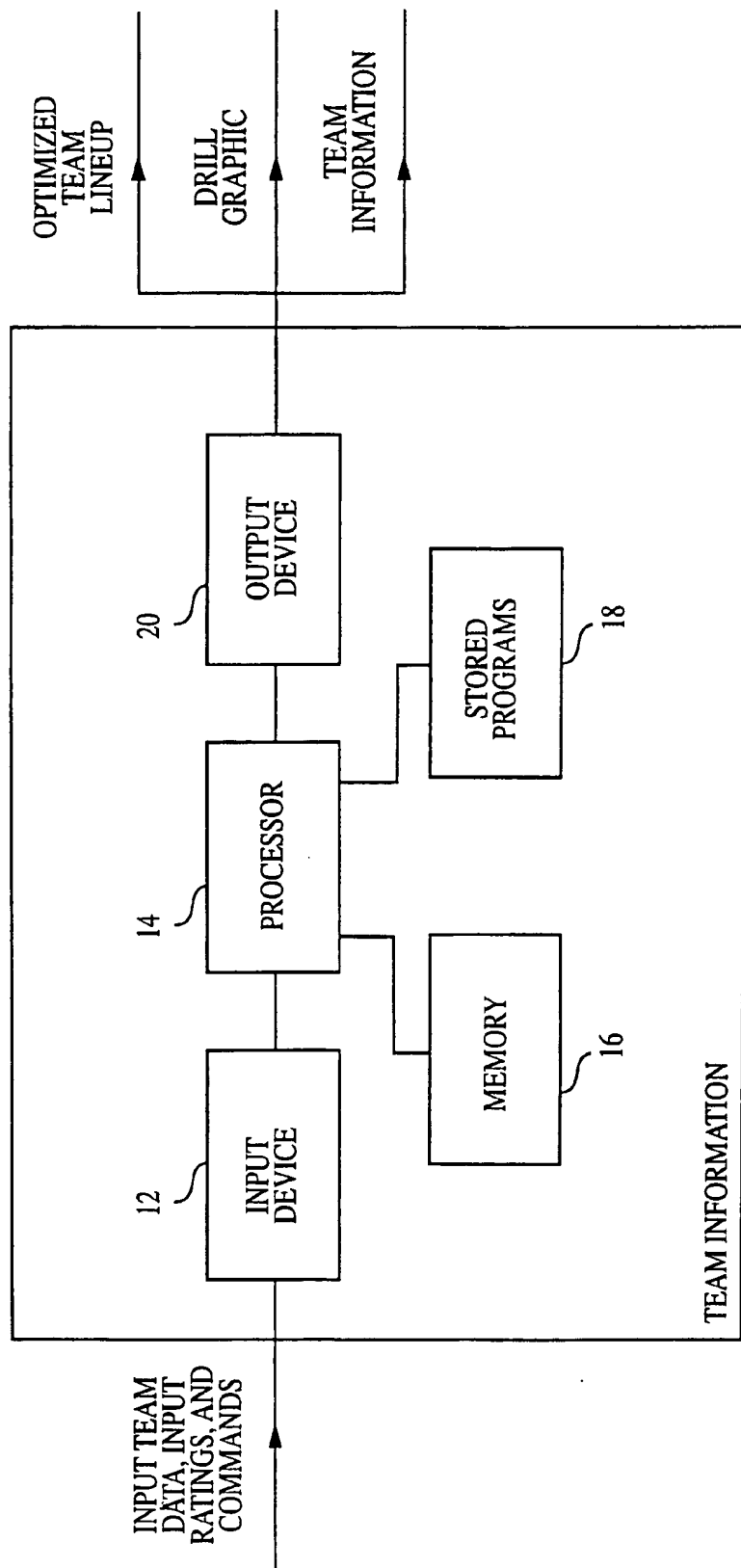


FIG. 5



7/33



10

FIG. 8

8/33

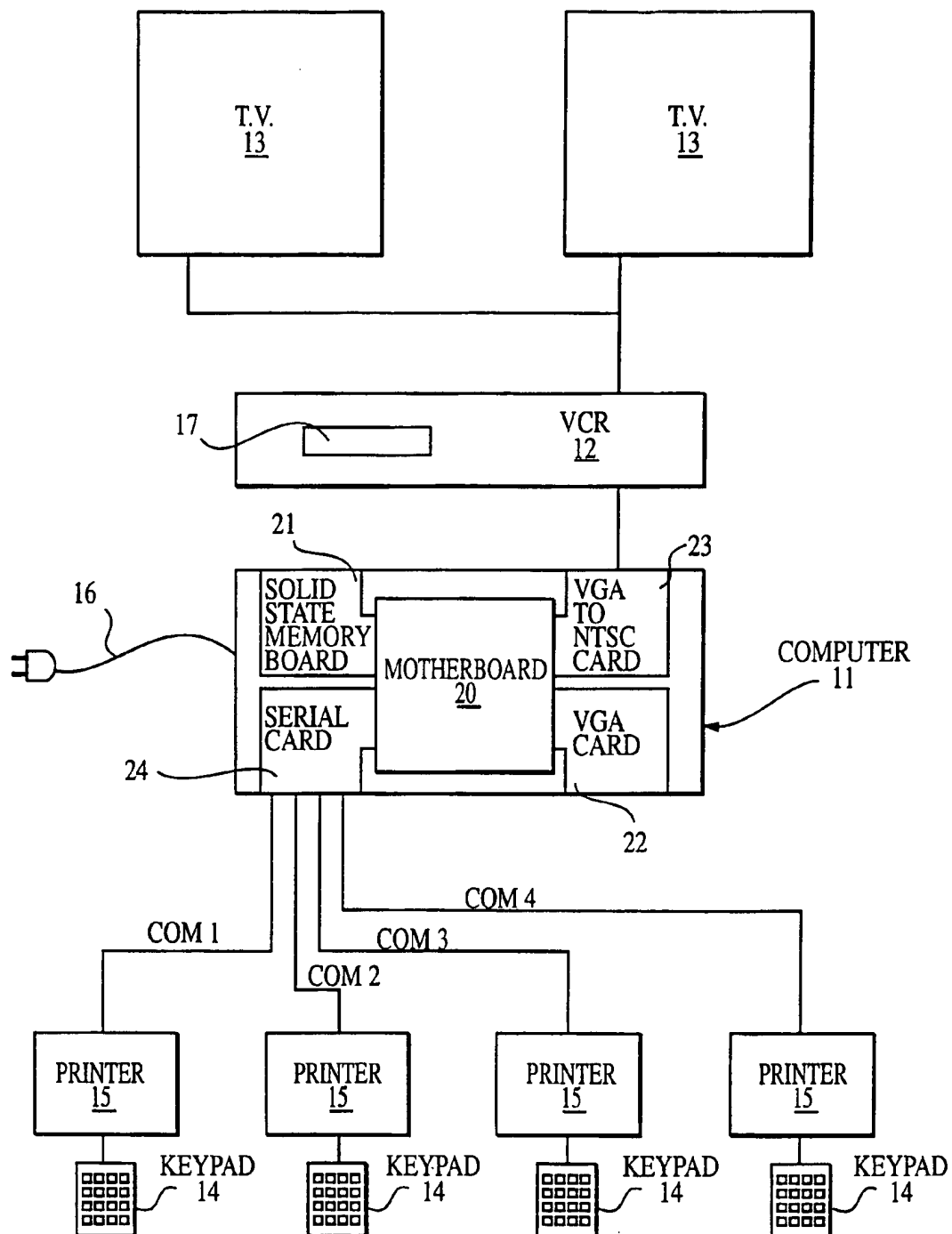


FIG. 9  
PRIOR ART

9/33

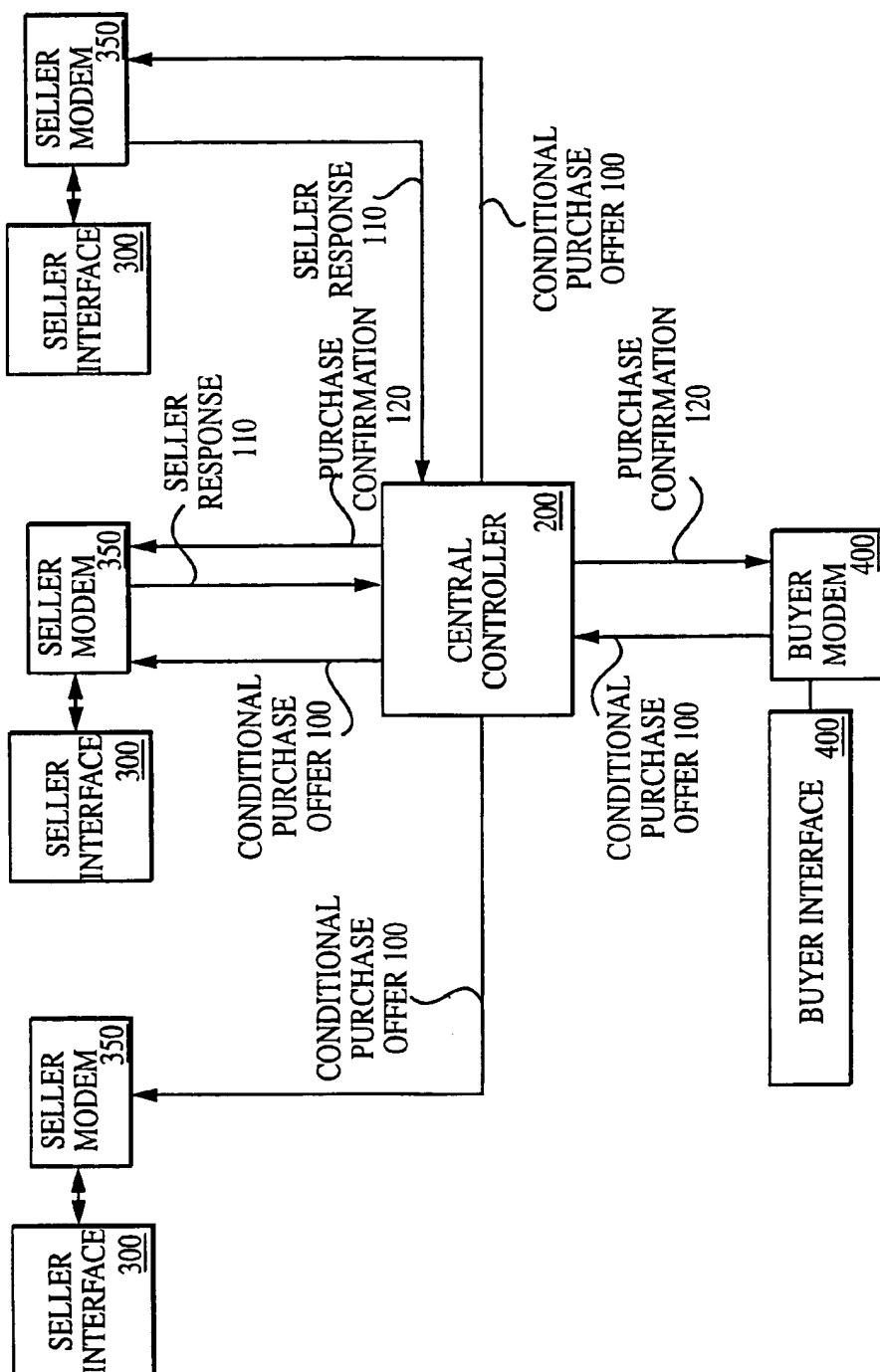


FIG. 10  
PRIOR ART

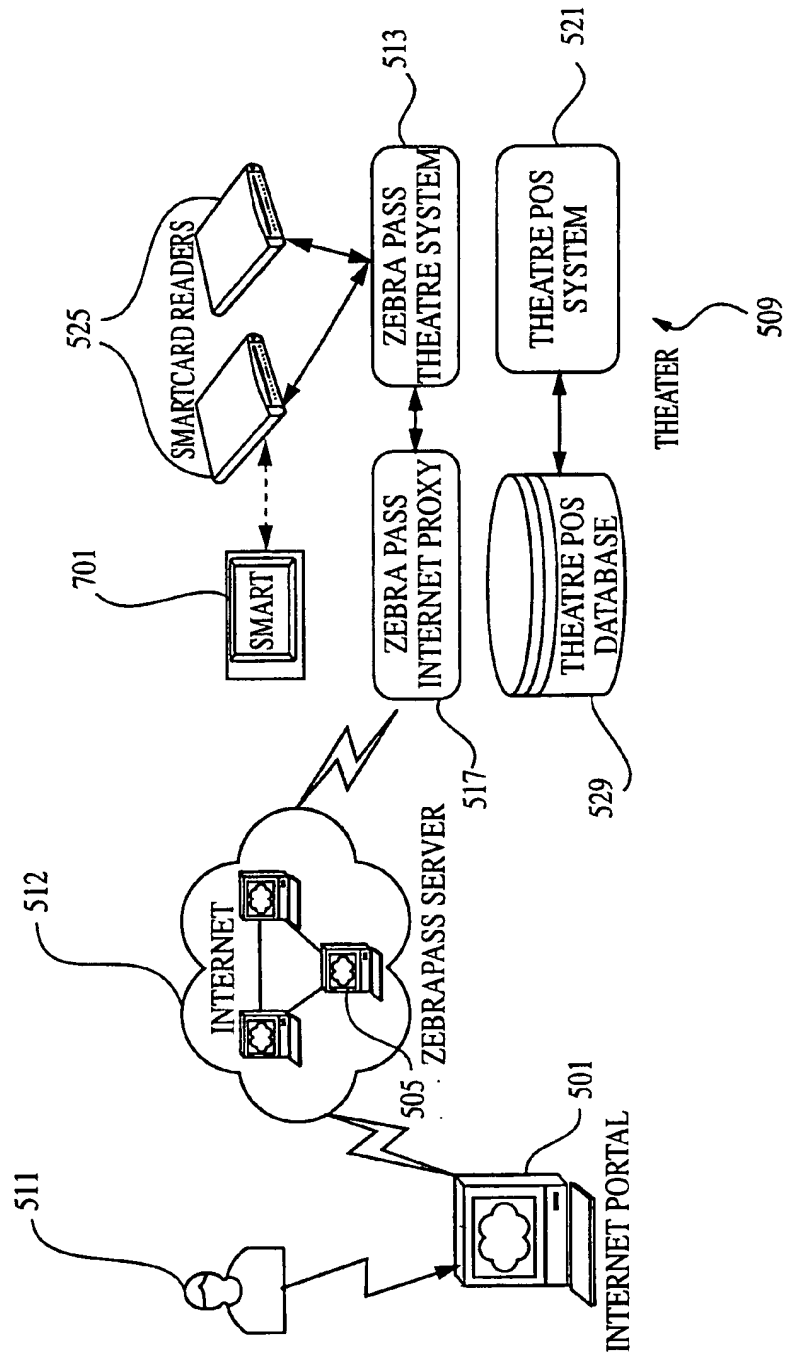


FIG. 11



11/33

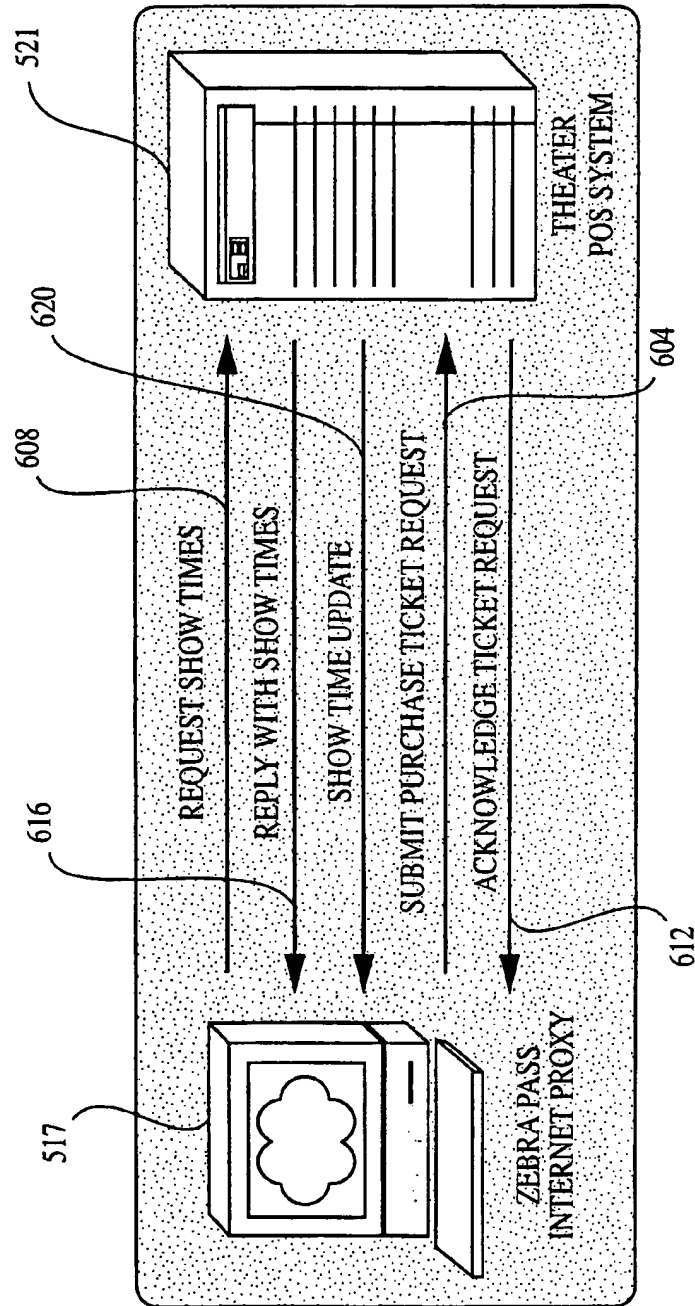


FIG. 12

12/33

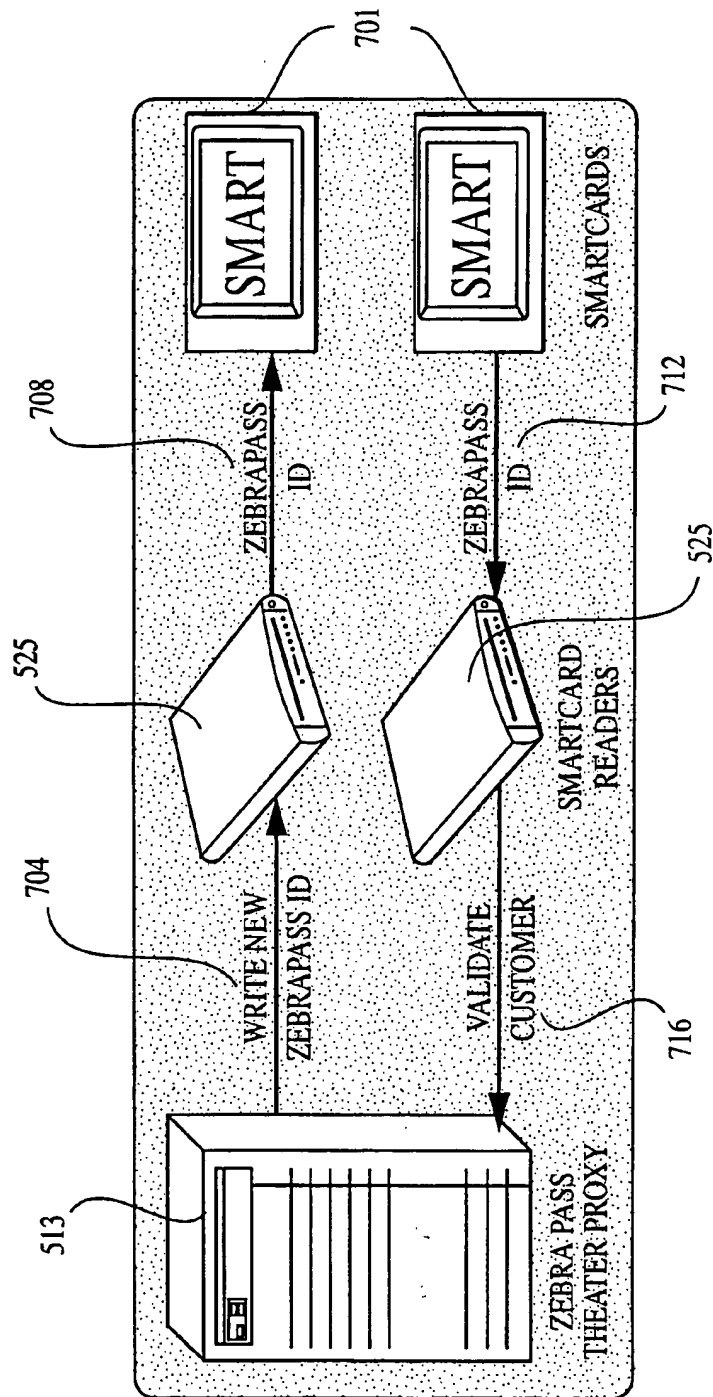


FIG. 13

13/33

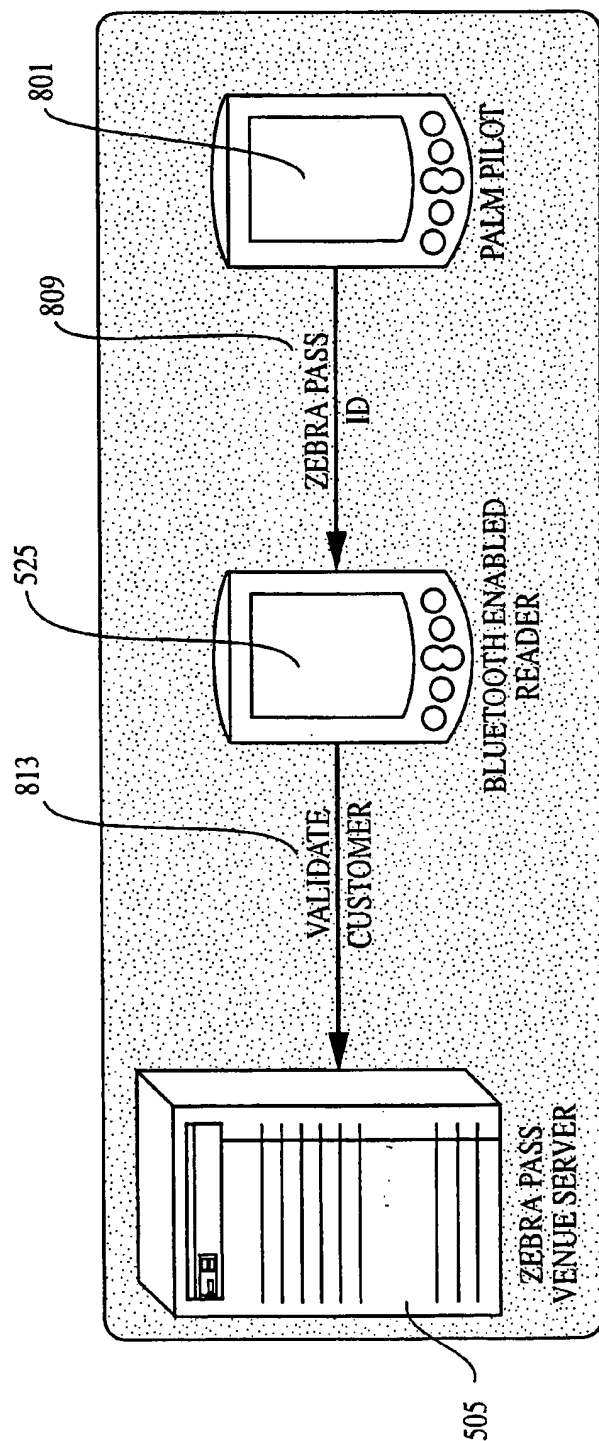


FIG. 14

14/33

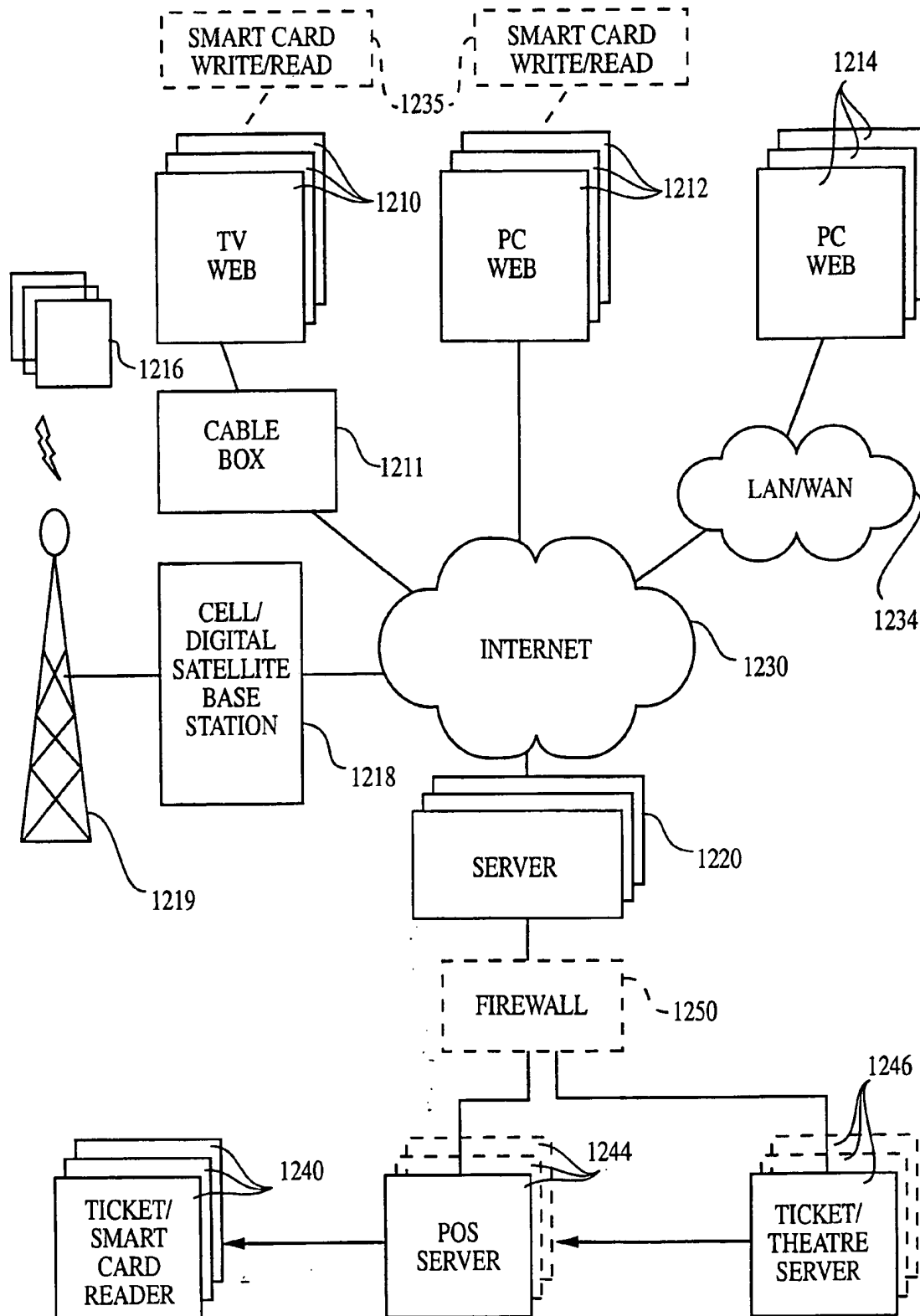


FIG. 15

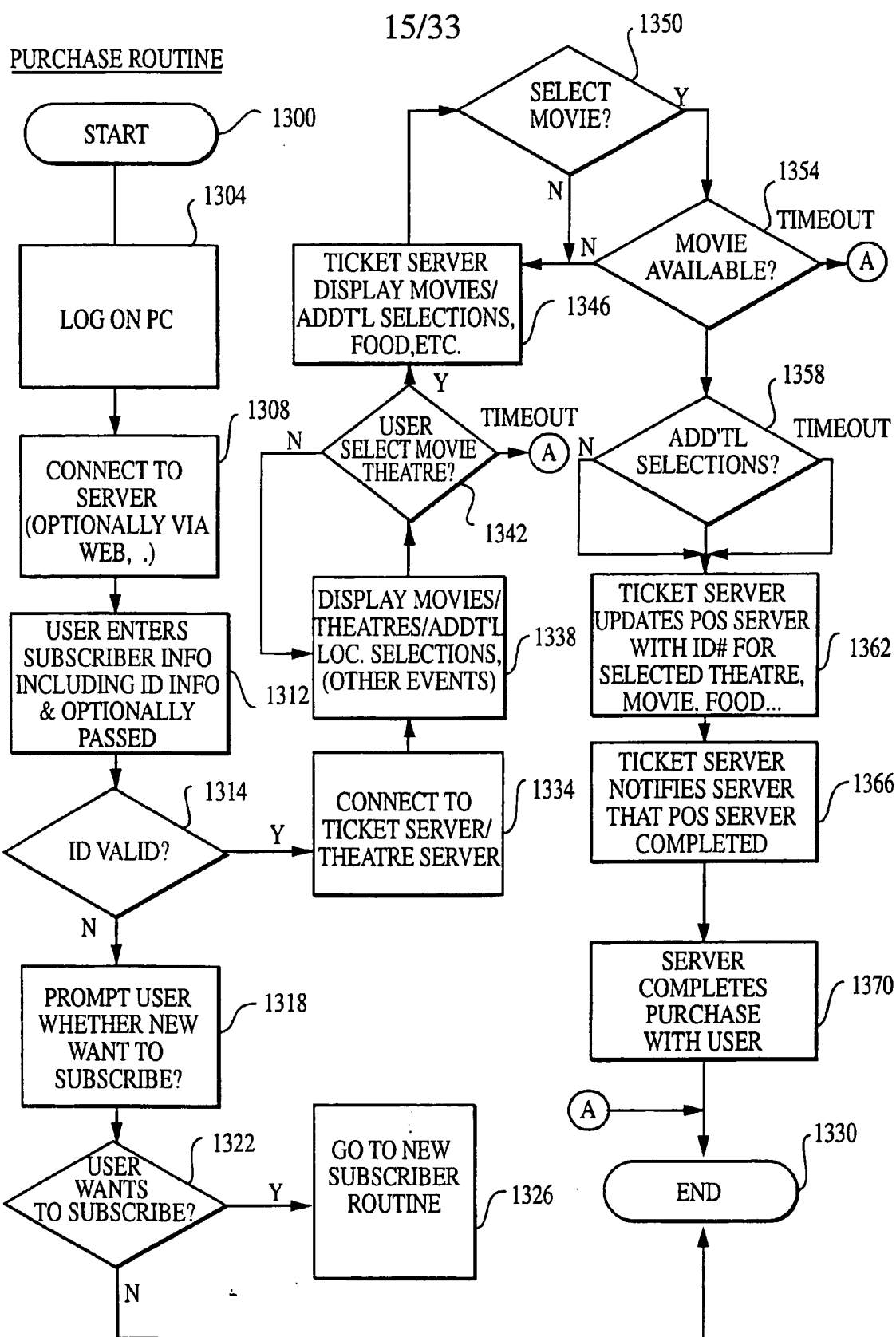


FIG. 16

16/33

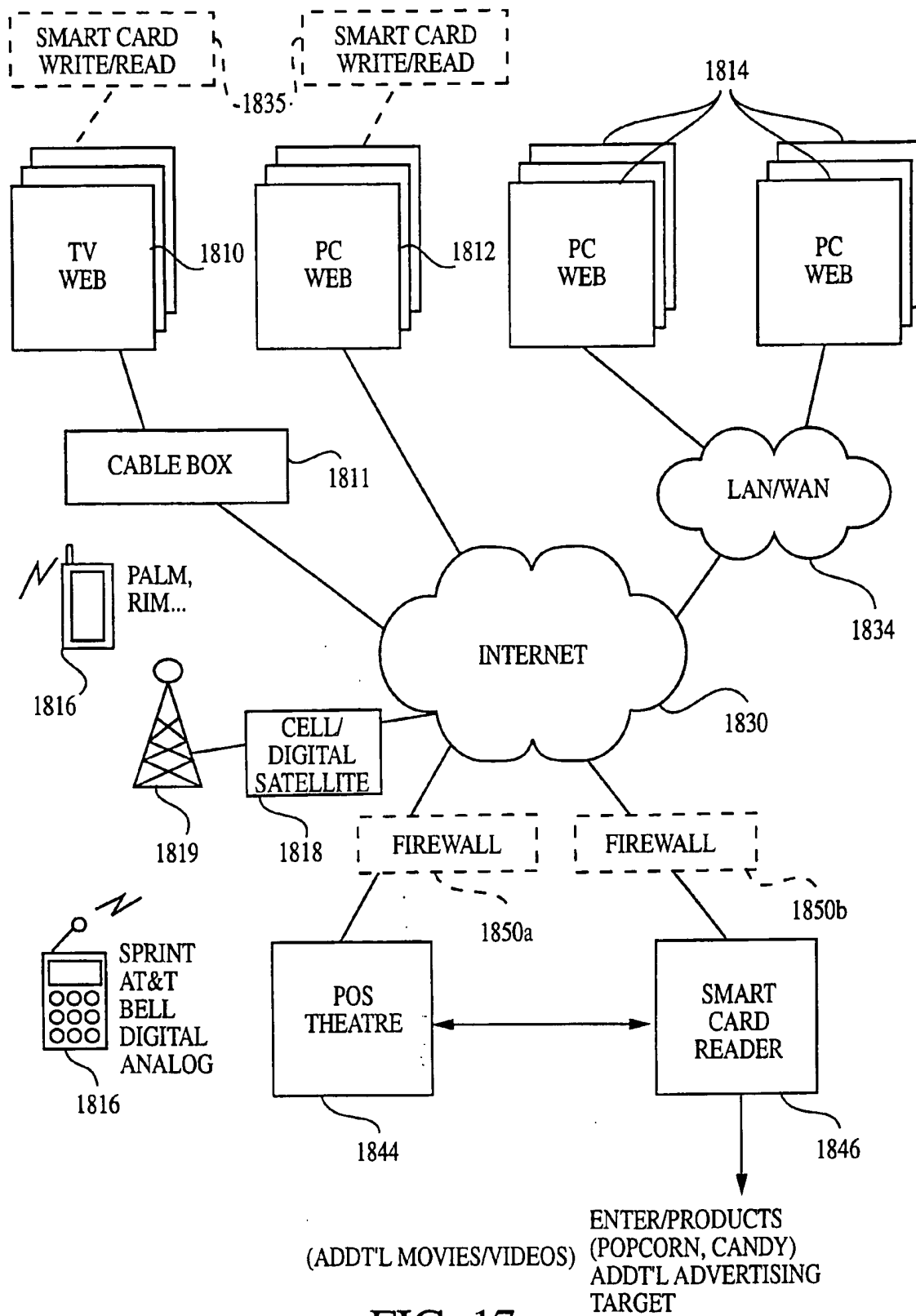


FIG. 17

17/33

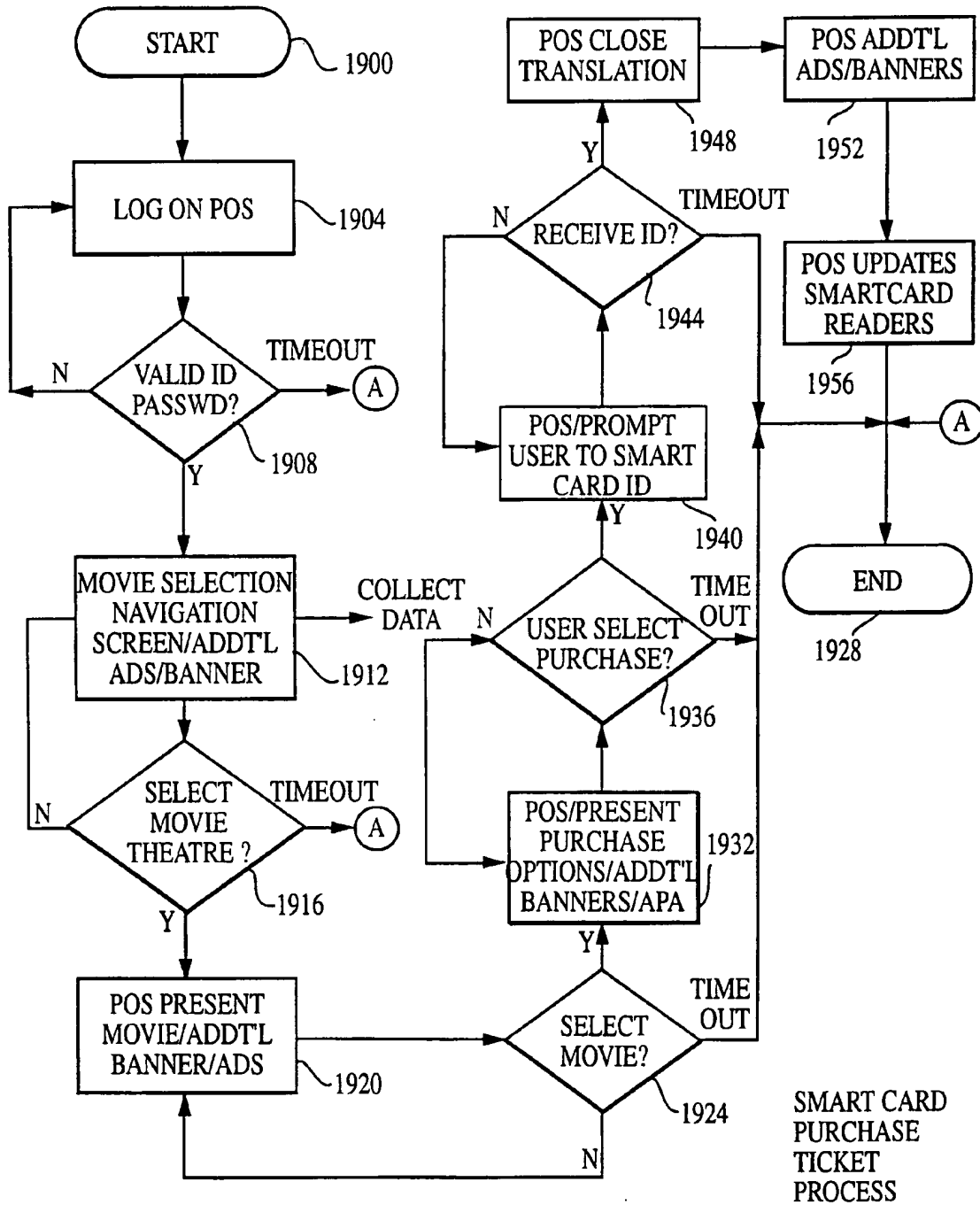


FIG. 18

18/33

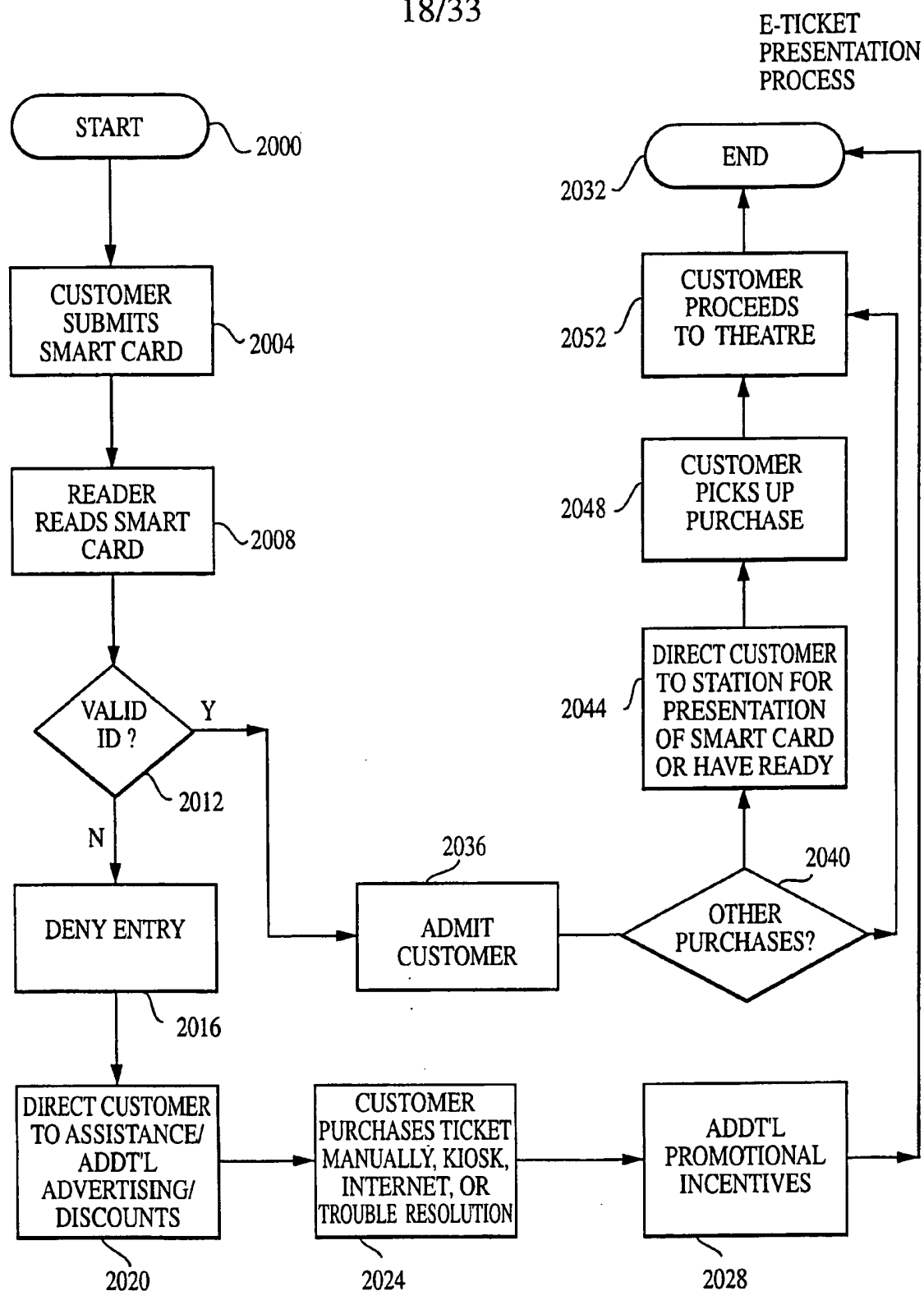


FIG. 19



19/33

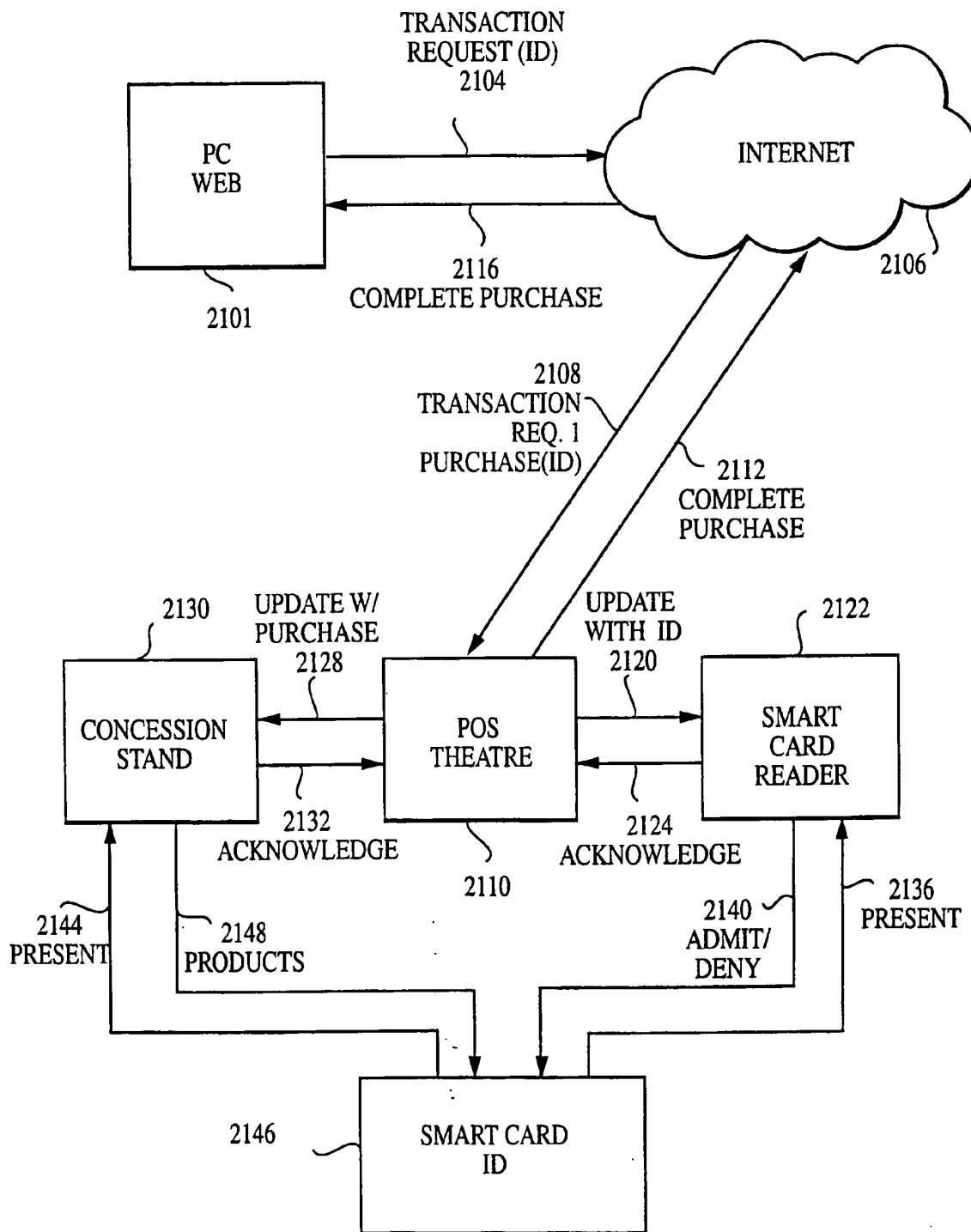


FIG. 20

20/33

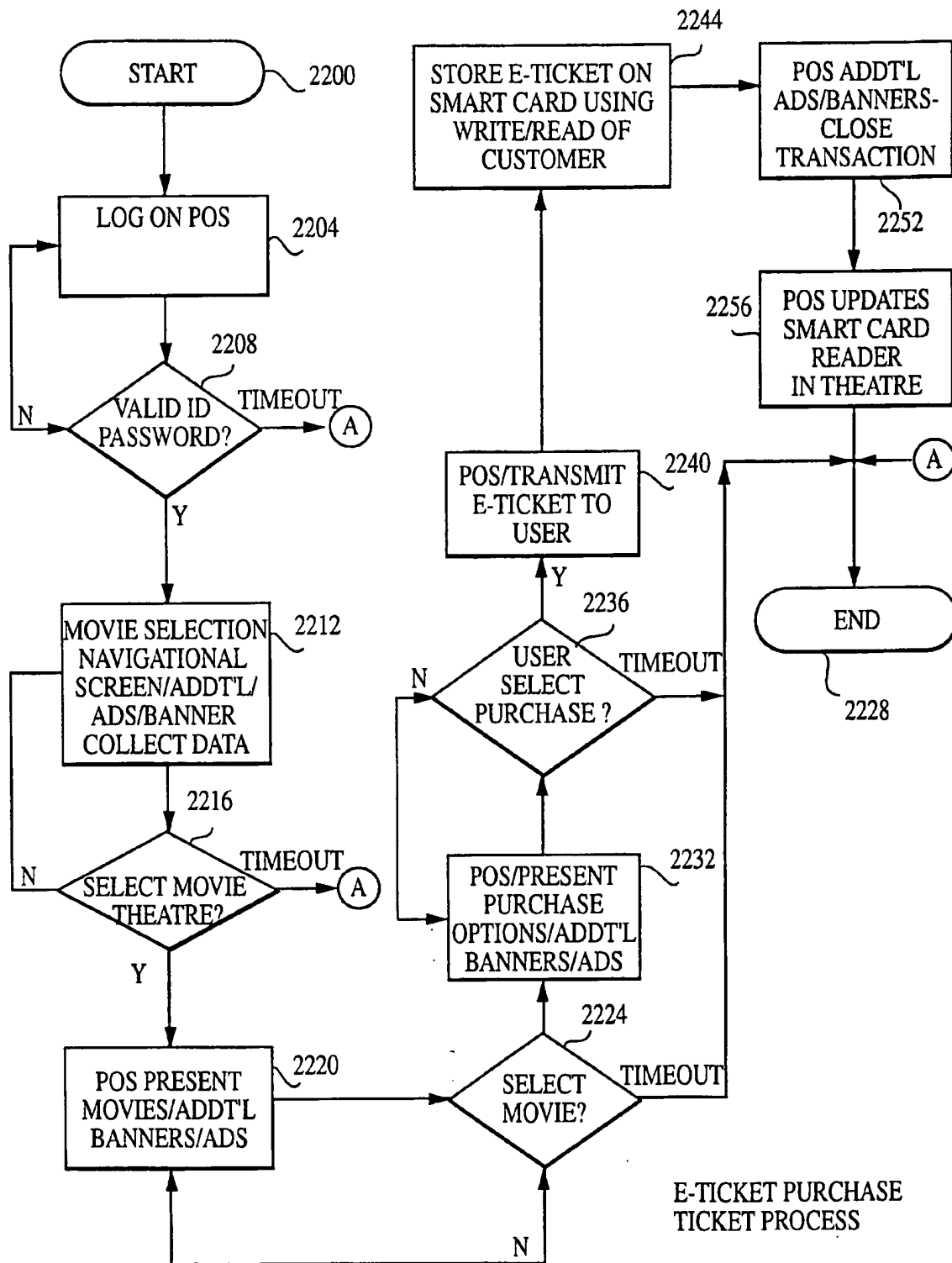


FIG. 21

21/33

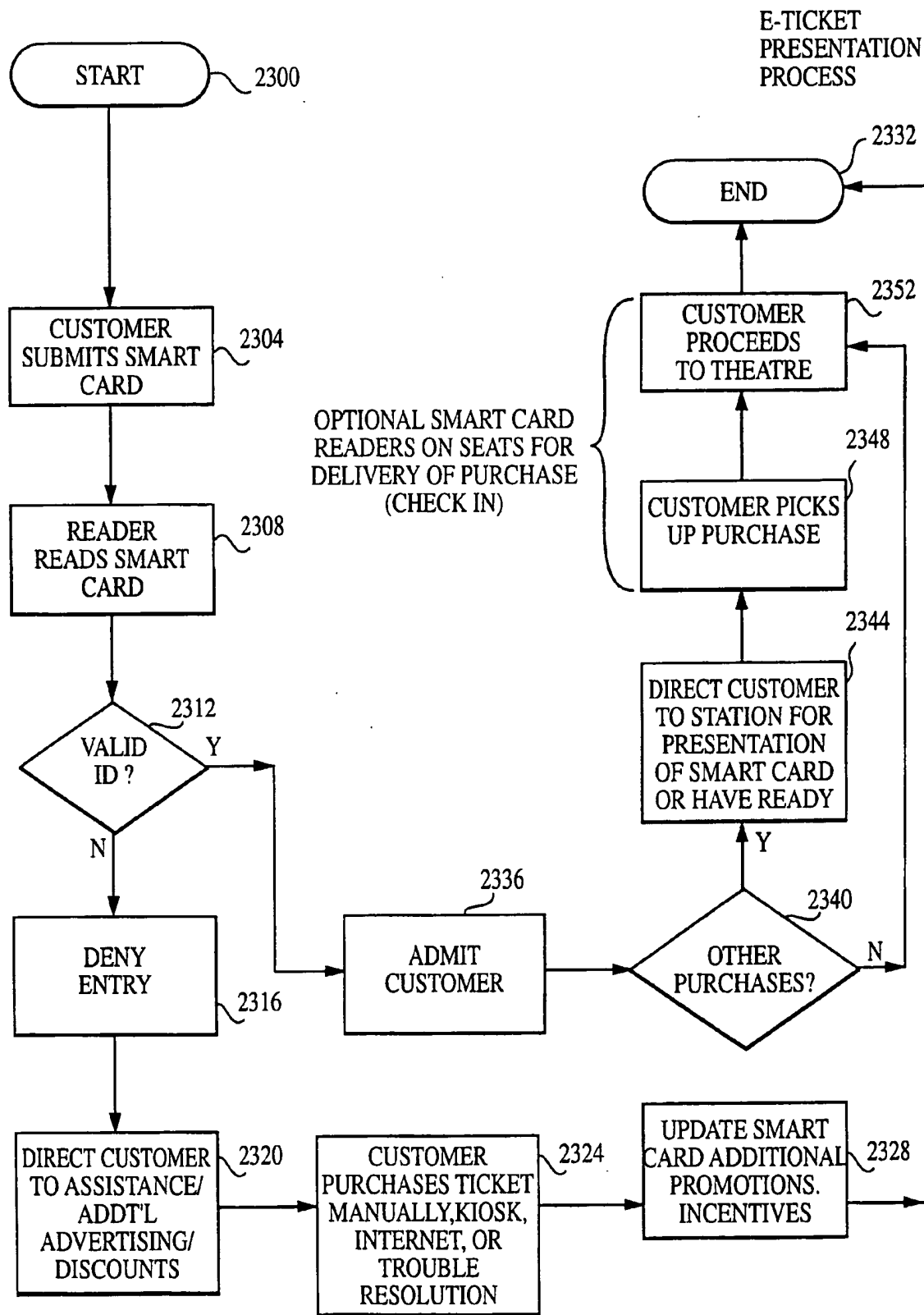


FIG. 22

22/33

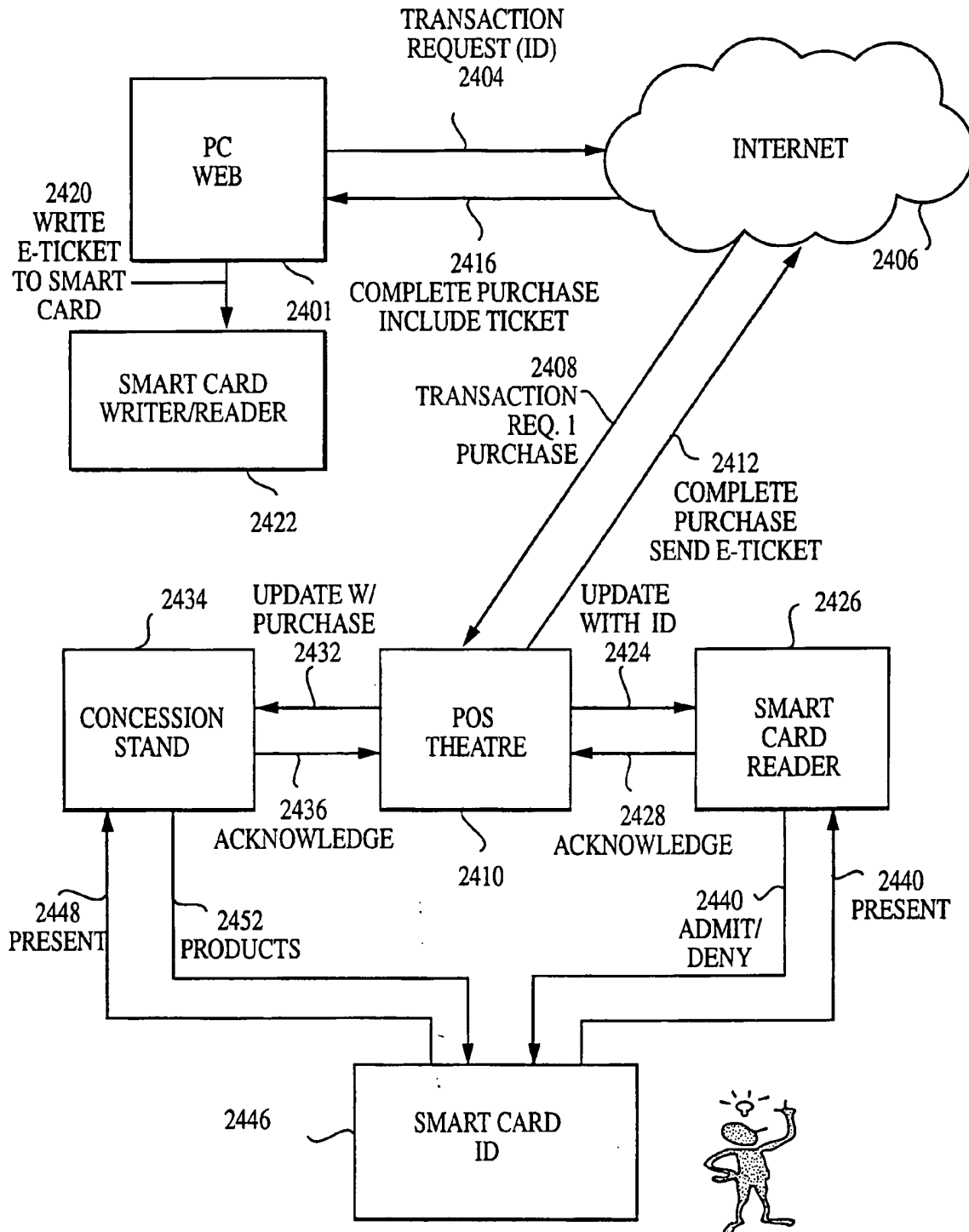


FIG. 23

23/33

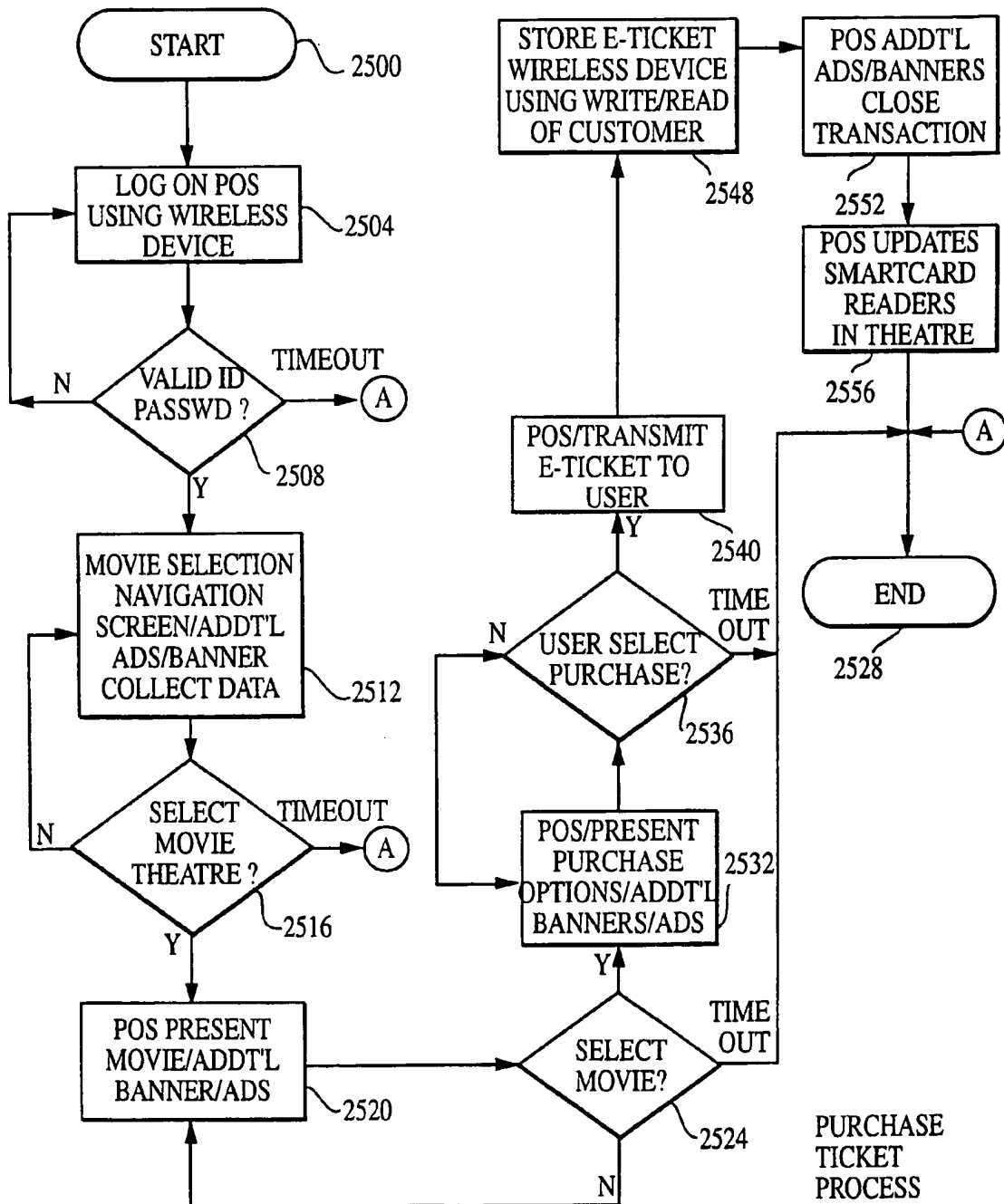


FIG. 24

24/33

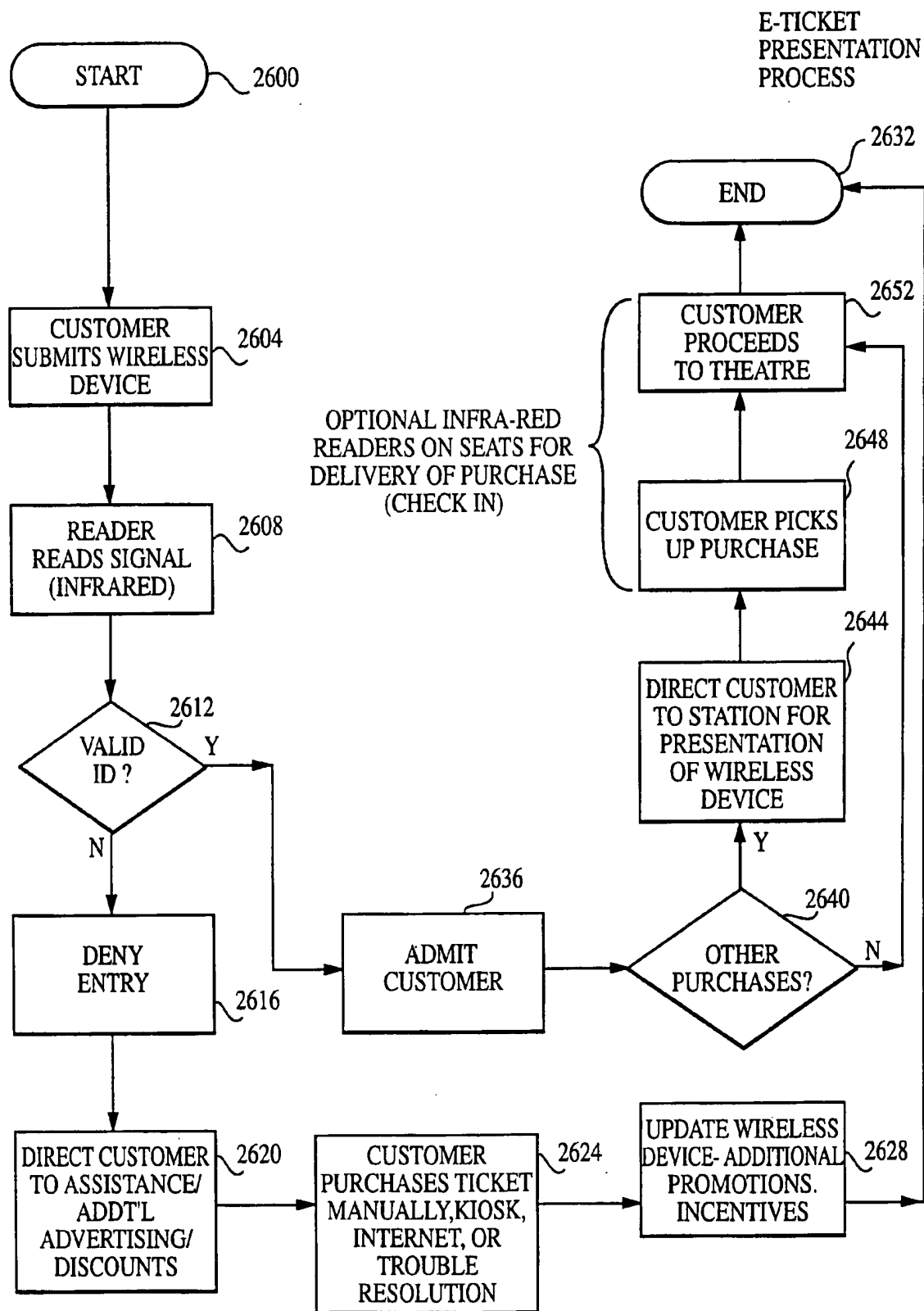


FIG. 25

25/33

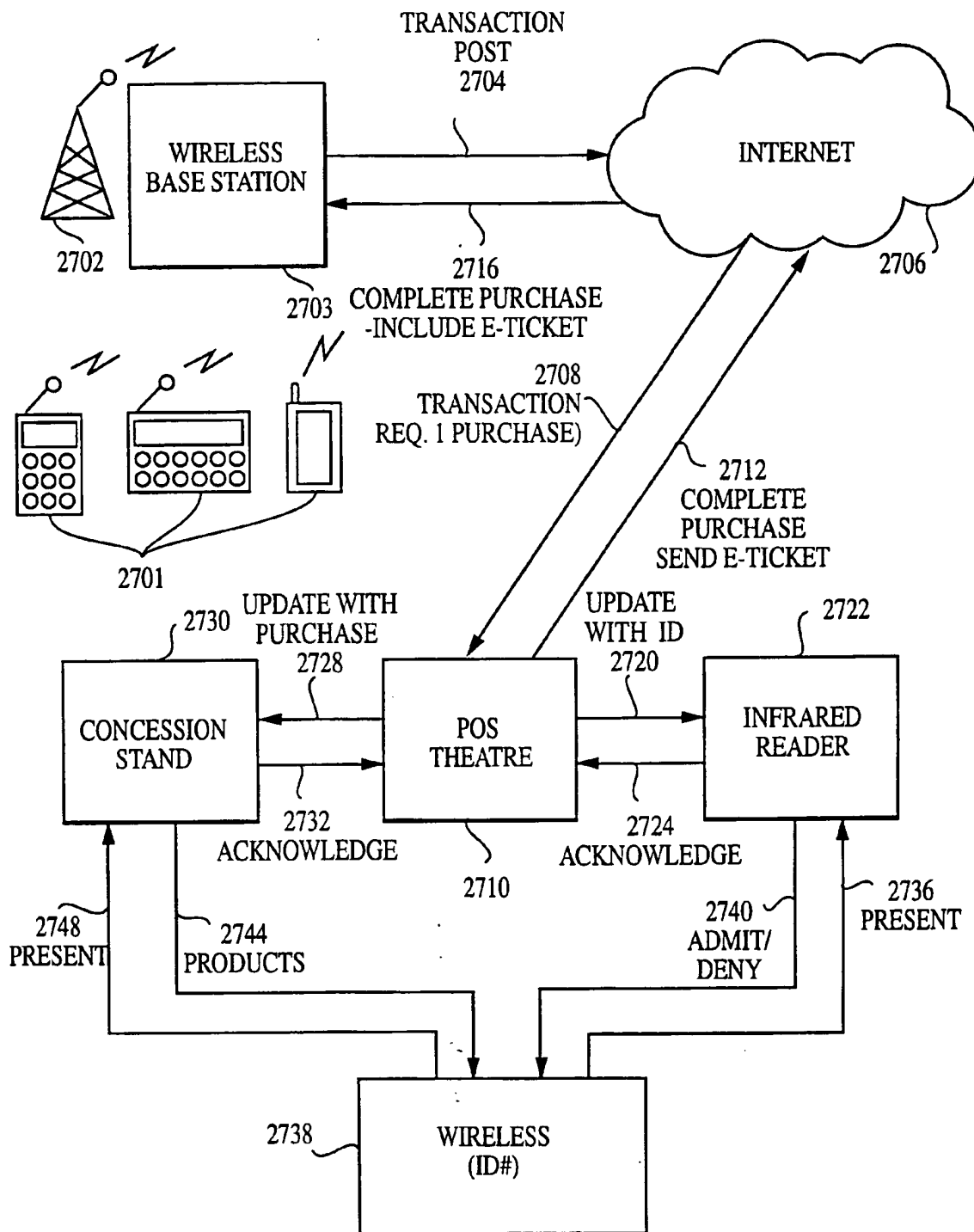


FIG. 26

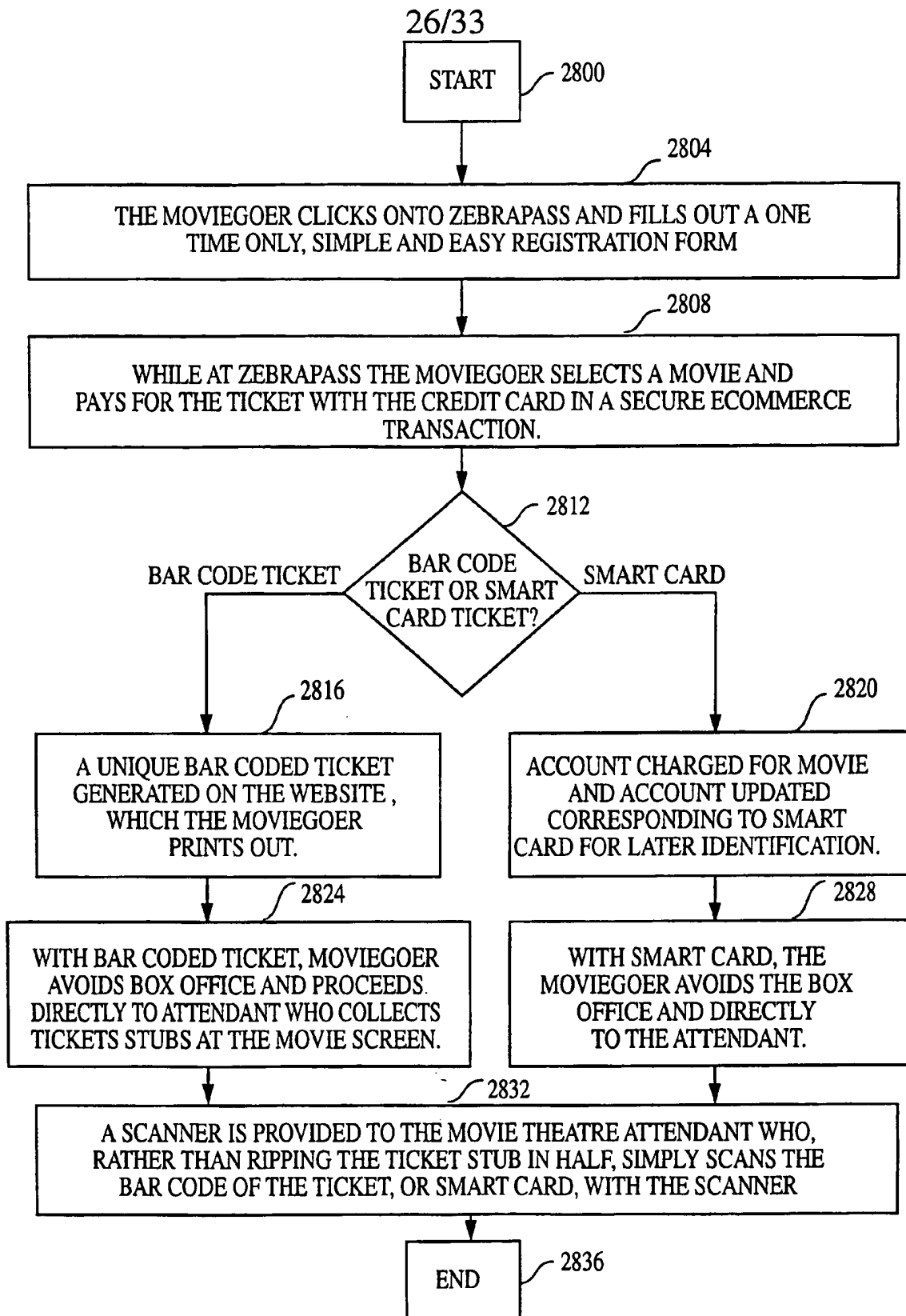


FIG. 27



27/33

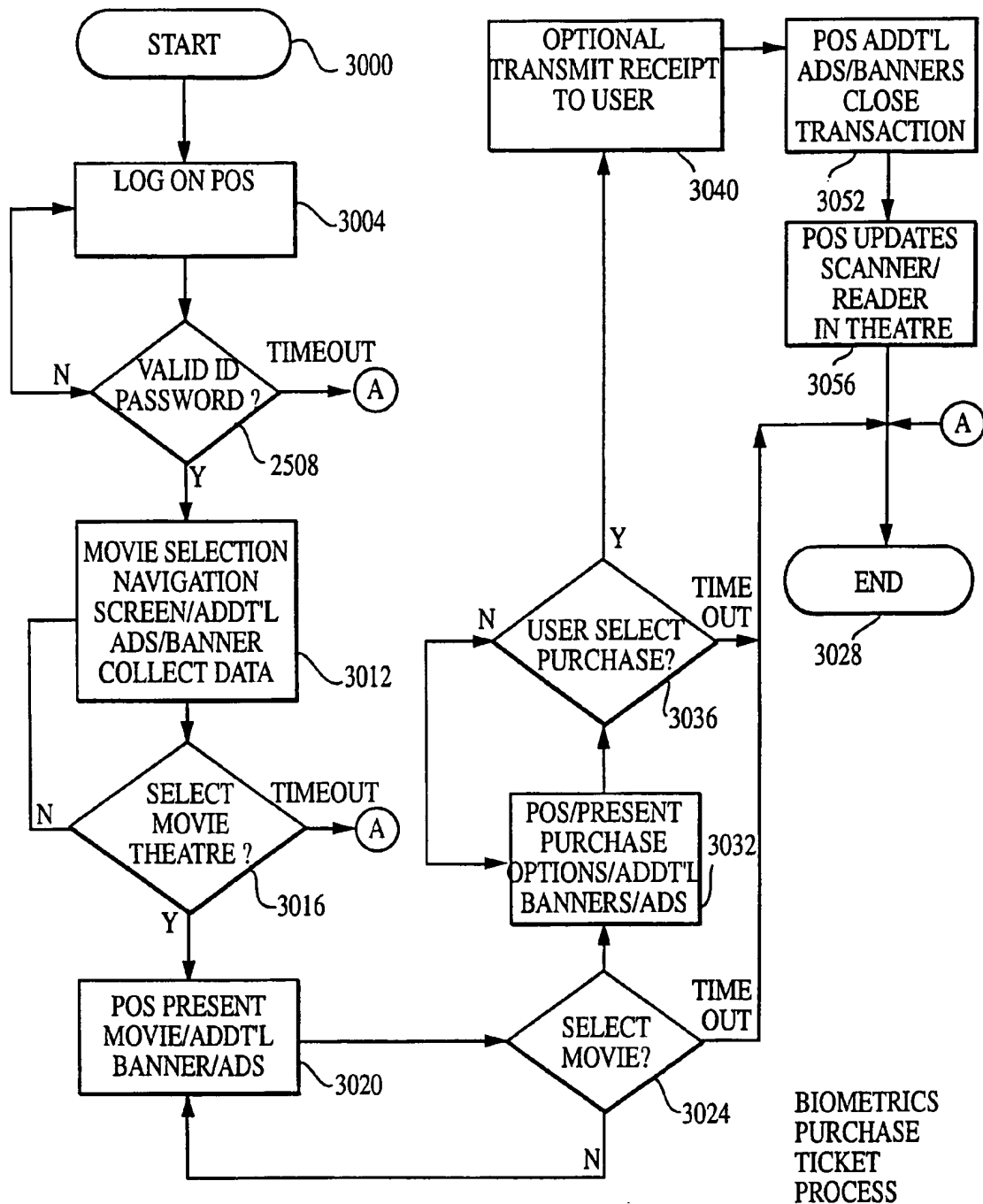


FIG. 28

28/33

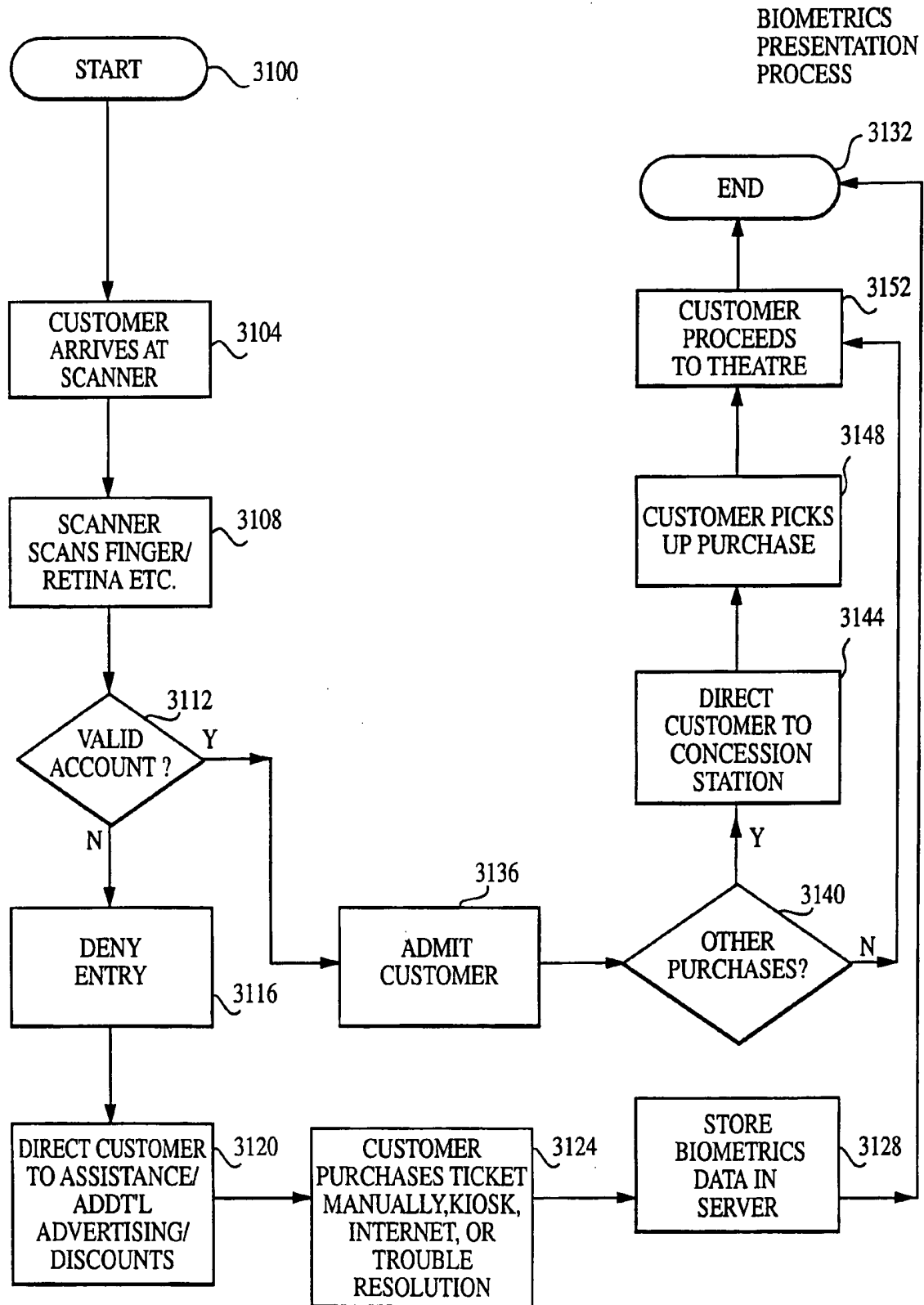


FIG. 29

29/33

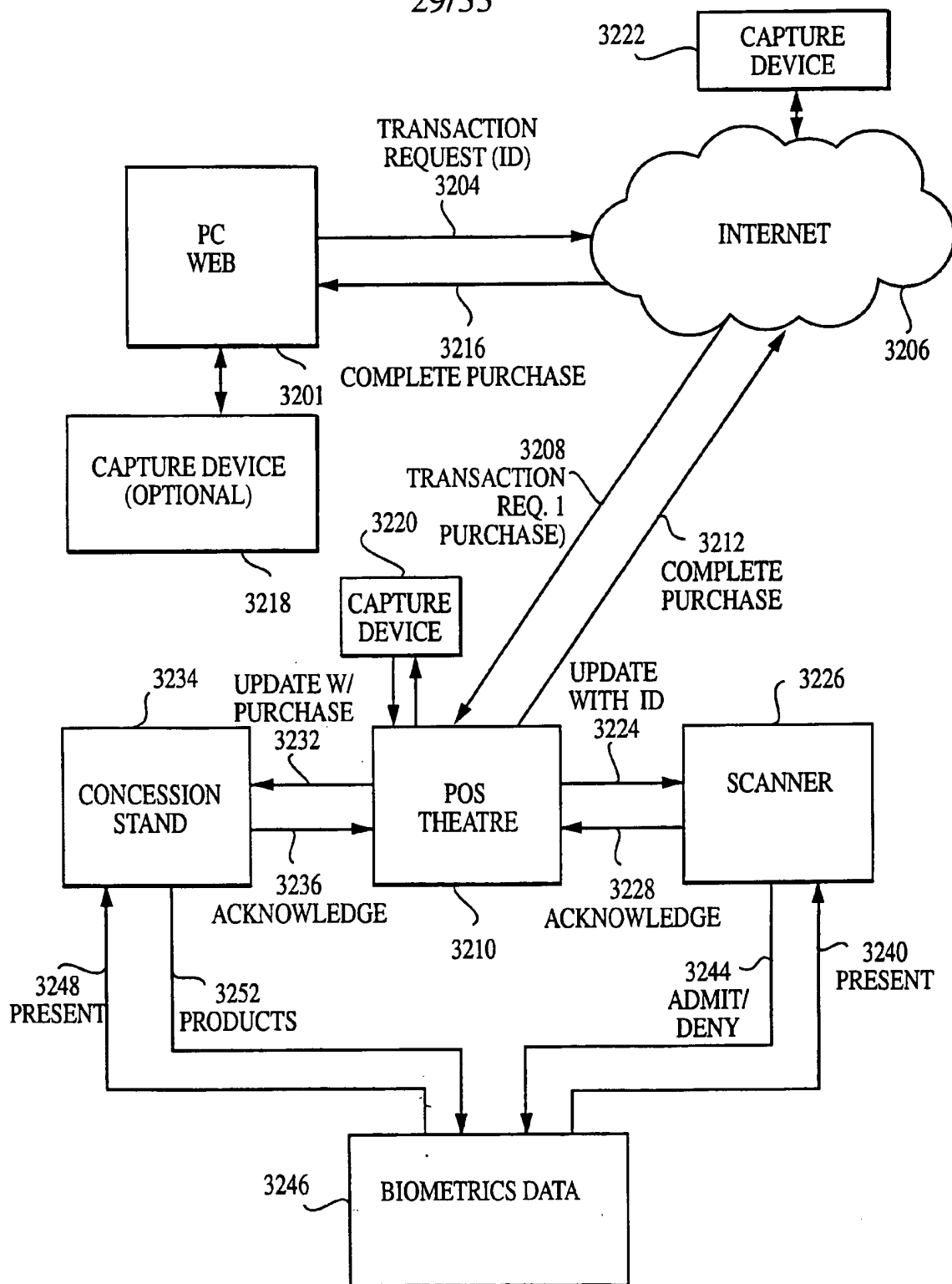


FIG. 30

30/33

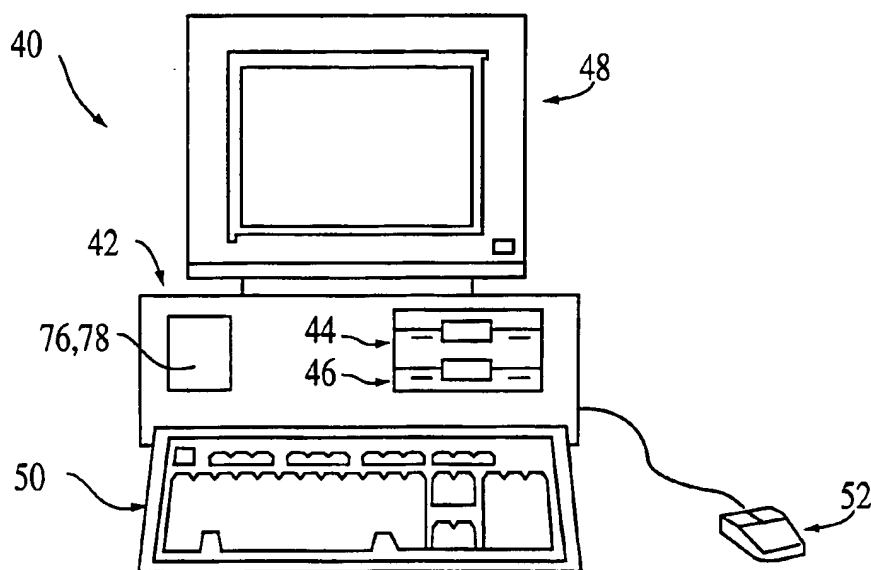


FIG. 31

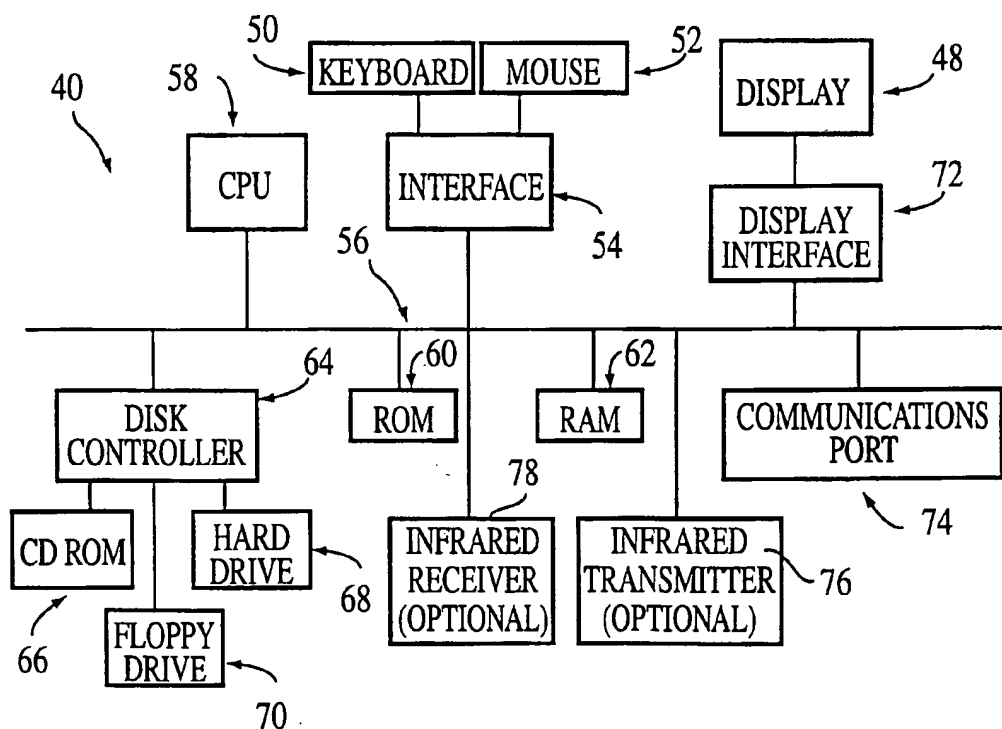


FIG. 32

31/33

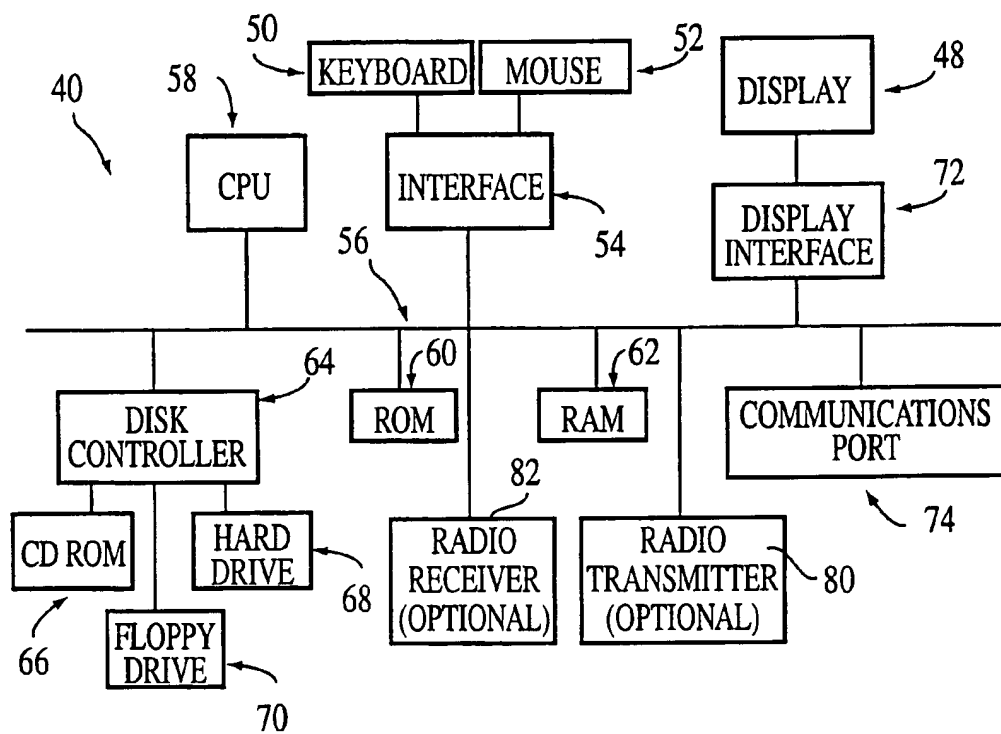


FIG. 33

32/33

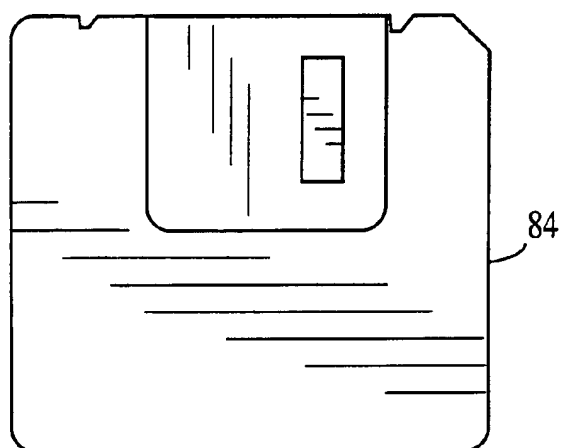
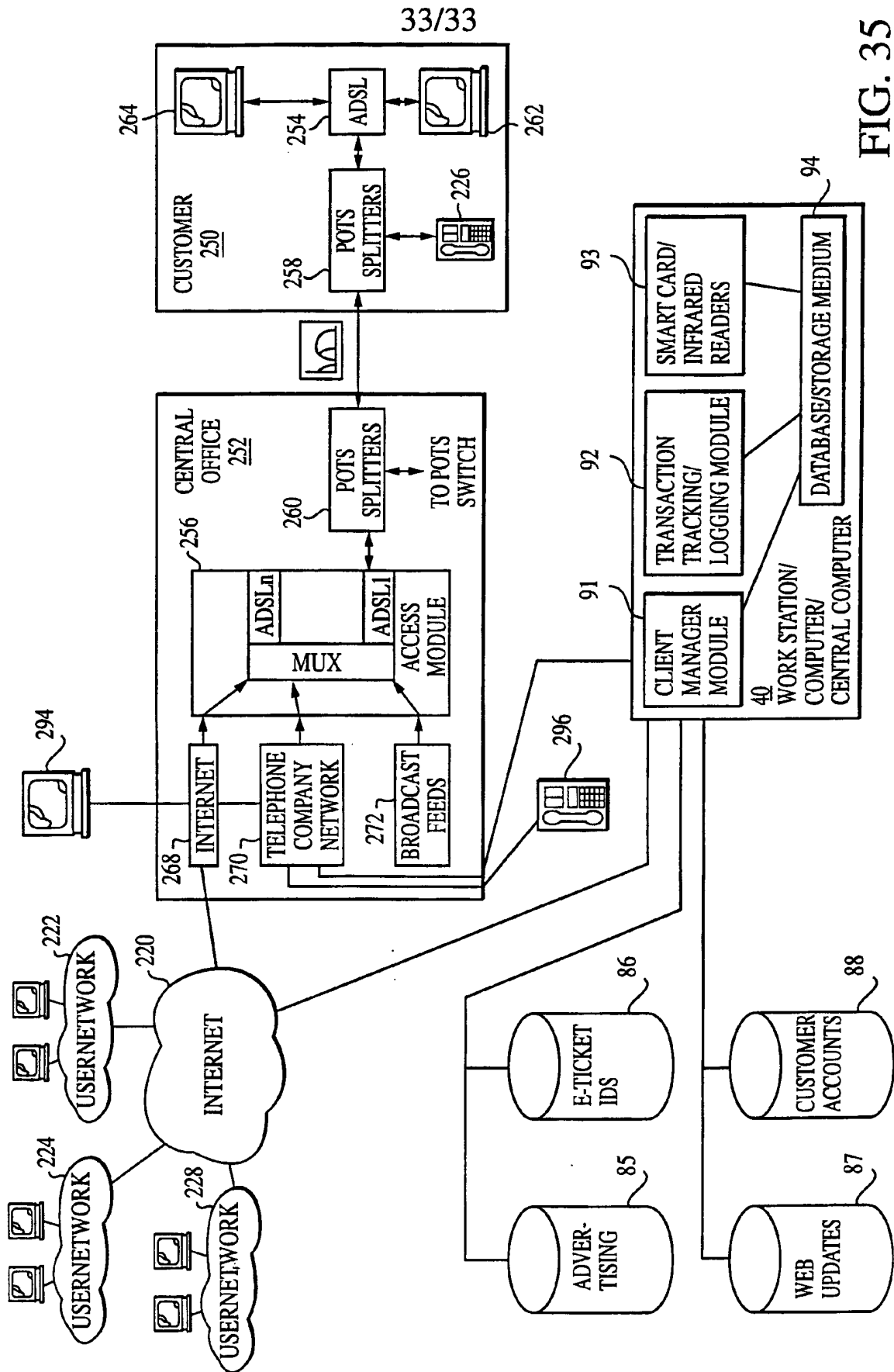


FIG. 34



# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/18371

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60

US CL : 705/5

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/5, 14, 16, 17

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
USPAT, EURO, JAPIO, NPL

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y, P	US 5,953,705 A (ONEDA) 14 September 1999 (14.09.1999) Column 6, line 35 - Column 7, line 40, Column 22, lines 30-53.	1-131
Y	US 5,732,398 A (TAGAWA) 24 March 1998 (24.03.1998), column 9, line 37-54, Column 16, lines 6-27, Column 18, lines 13-46.	1-131
A, E	US 6,094,640 A (GOHEEN) 25 July 2000 (25.07.2000), Column 4, line 65 - Column 5, line 32, Column 6, lines 54-60, Column 7, line 51 - Column 8, line 52.	1-131
A	US 5,239,480 A (HUEGEL) 24 August 1993 (24.08.1993), column 4, line 60 - Column	1-131
A	US 5,504,321 A (SHELDON) 02 April 1996 (02.04.1996), Column 2, line 30 - Column 3, line 66.	1-131
A	US 5,754,654 A (HIROYA ET AL) 19 May 1998 (19.05.1998) Column 11, line 30 - Column 24, line 43.	1-131
A	US 5,797,126 A (HELBLING ET AL) 18 August 1998 (18.08.1998) Column 7, line 28 - Column 11, line 29	1-131



Further documents are listed in the continuation of Box C.



See patent family annex.

Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"Z" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

23 August 2000 (23.08.2000)

Date of mailing of the international search report

25 SEP 2000

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks

Box PCT

Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Todd Voeltz

Telephone No. (703) 305-9714



# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/18371

**Continuation of Item 4 of the first sheet:** The title is objected to because it is too long and imprecise, the new title is:  
System and Method for Provisioning Ticket Purchases over Global or Local Networks.

**Continuation of B. FIELDS SEARCHED Item 3:** EAST, DialogWeb  
(ticketless and (theater or reservation or event) and card)